

INŠTITUT ZA MATEMATIKO, FIZIKO IN MEHANIKO



LETNO
POROČILO
2017

Ljubljana 2018

INŠTITUT ZA MATEMATIKO, FIZIKO IN MEHANIKO

Letno poročilo 2017

Interna publikacija IMFM

Zbral in uredil Janez Krušič, stavljeno s \TeX om

Natisnila *ABO grafika d.o.o.* v nakladi 80 izvodov

Spletna objava: http://porocila.imfm.si/2017/IMFM_2017.pdf

Ljubljana 2018

ISSN 1318–539X

LETNO POROČILO 2017

VSEBINA

Uvod	3
Oddelek za matematiko	7
Projekti	7
Organizacija mednarodnih konferenc	8
Mladi raziskovalci	9
Bibliografije raziskovalcev	9
Tuji gosti	65
Gostovanja	67
Seminarji	68
Oddelek za fiziko	83
Projekti	83
Vodenje raziskovalnega centra	83
Bibliografije raziskovalcev	83
Tuji gosti	89
Gostovanja	89
Seminarji	89
Oddelek za teoretično računalništvo	91
Projekti	91
Mladi raziskovalci	91
Bibliografije raziskovalcev	91
Tuji gosti	102
Gostovanja	102
Seminarji	103
Matematični kolokviji	109
Matematična knjižnica z bibliografskim oddelkom	111
Ars Mathematica Contemporanea	113

Legenda za bibliografije raziskovalcev v poročilu:

- A. objavljene znanstvene monografije,
- B. raziskovalni članki sprejeti v objavo v znanstvenih revijah in v zbornikih konferenc,
- C. raziskovalni članki objavljeni v znanstvenih revijah in v zbornikih konferenc,
- D. uredništvo v znanstvenih revijah in zbornikih znanstvenih konferenc,
- E. organizacija mednarodnih in domačih znanstvenih srečanj,
- F. vabljeni predavanja na tujih institucijah in mednarodnih konferencah,
- G. aktivne udeležbe na mednarodnih in domačih konferencah,
- H. strokovni članki,
- I. drugi sumarni podatki (število zadetkov v COBISS-u, MATHREV, mentorstva diplomantom, magistrantom, doktorantom). Ti podatki se dodajo v poročilo samo na posebno zahtevo raziskovalca (samo število, brez imen in datumov).

UVOD

Med dogodki v preteklem letu, ki sodijo v upravno-organizacijski del delovanja IMFM, velja posebej omeniti akcijo, s katero sta UL FMF in inštitut želela trajno pravno urediti status prostorov, v katerih domujemo. Za samo obliko ureditve gre zahvala UL FMF, ki je predlagala ustanovitev osebne služnosti rabe na nepremičnini. S pobudo se je strinjala tudi univerza, upravni odbor UL je podpis pogodbe o služnosti na februarški seji podprl. Žal pristojno ministrstvo v imenu ustanovitelja UL te razumne rešitve ni sprejelo v predlagani obliki.

Če že ne morem sporočiti nič spodbudnega o urejanju statusa osrednjega slovenskega matematičnega inštituta, toliko lažje zapišem kratek povzetek raziskovalnega dela v preteklem letu.

Konec leta 2017 je bilo na Inštitutu za matematiko, fiziko in mehaniko zaposlenih 137 sodelavcev (126 doktorjev znanosti, dva magistra znanosti, sedem magistrstov ter dva z univerzitetno izobrazbo), od tega 32 redno ter 105 dopolnilno zaposlenih.

Na inštitutu imamo osem programskih skupin – šest s področja matematike, eno s področja teoretičnega računalništva in eno s področja fizike. Vodje programskih skupin na Oddelku za matematiko so: prof. dr. Matej Brešar, prof. dr. Franc Forstnerič, prof. dr. Sandi Klavžar, prof. dr. Dragan Marušič, prof. dr. Primož Moravec in prof. dr. Dušan Repovš. Programsko skupino na Oddelku za teoretično računalništvo vodi prof. dr. Tomaž Pisanski, na Oddelku za fiziko pa prof. dr. Zvonko Jagličič. Na Oddelku za fiziko deluje tudi infrastrukturna skupina, ki jo vodi doc. dr. Vojko Jazbinšek.

V preteklem letu se je zaključil en projekt, ki ga je sofinancirala ARRS. Temeljni projekt je sodil na Oddelek za matematiko, naslov projekta je bil »Limitne množice iteracijskih sistemov v dimenzijah 3 in 4«, vodja pa dr. Lyubomyr Zdomsky.

Lani je začelo teči šest temeljnih projektov, ki jih sofinancira ARRS, od tega pet na Oddelku za matematiko in en na Oddelku za fiziko. Novi projekti na Oddelku za matematiko so: projekt z naslovom »Prekrižna števila in njihova uporaba«, vodja projekta je prof. dr. Bojan Mohar, projekt z naslovom »Zlivanje biomedicinskih podatkov z uporabo nenegativne matrične tri-faktorizacije«, vodja je prof. dr. Nataša Pržulj, projekt z naslovom »Zvezni in diskretni sistemi v nelinearni analizi«, vodja je prof. dr. Dušan

Repovš, projekt z naslovom »Analiza zveznih in diskretnih matematičnih modelov v biologiji, kemiji in genetiki«, vodja je dr. Vicentiu Radulescu – pri tem projektu gre za skupni madžarsko-slovenski projekt, pri katerem Madžarski nacionalni urad za raziskave, razvoj in inovacije (NKFIH) deluje kot vodilna agencija, ter projekt z naslovom »Preslikave na matrikah in operatorjih«, vodja projekta je prof. dr. Peter Šemrl. Nov projekt na Oddelku za fiziko se imenuje »Senzorske tehnologije pri kontroli posegov v objekte kulturne dediščine«, vodja projekta je prof. dr. Zvonko Jagličič. Na treh novih projektih IMFM nastopa kot sodelujoča organizacija. V okviru Oddelka za matematiko sta to: projekt z naslovom »Pozitivne preslikave in realna algebraična geometrija«, poteka na Fakulteti za matematiko in fiziko Univerze v Ljubljani, vodja je prof. dr. Igor Klep, ter projekt z naslovom »Visoko zmogljiv reševalec za binarne kvadratične probleme«, poteka na Fakulteti za strojništvo Univerze v Ljubljani, vodja je prof. dr. Janez Povh. Pri slednjem gre za skupni avstrijsko-slovenski projekt, pri katerem Avstrijska znanstvena raziskovalna fundacija (FWF) deluje kot vodilna agencija. V okviru Oddelka za teoretično računalništvo pa je nov projekt z naslovom »Bločno modeliranje večnivojskih in časovnih omrežij«, poteka na Fakulteti za družbene vede Univerze v Ljubljani, vodja je prof. dr. Aleš Žiberna.

V skladu z Javnim pozivom za dodelitev mentorskih mest raziskovalnim programom v letu 2017 je novi mentor mlademu raziskovalcu postal prof. dr. Sandi Klavžar (P1-0297).

S 01. oktobrom 2017 je na našem inštitutu pričela z usposabljanjem nova mlada raziskovalka Vesna Iršič (mentor prof. dr. Sandi Klavžar). Usposablja se na področju »Matematika«.

Konec leta 2017 se je na IMFM usposabljal sedem mladih raziskovalcev – šest na Oddelku za matematiko in eden na Oddelku za teoretično računalništvo. Njihovo usposabljanje v pretežni meri financira ARRS.

Preteklo leto sta doktorirala dva mlada raziskovalca, in sicer: dr. Dejan Govc (septembra) in dr. Aljaž Zalar (marca) – oba na Fakulteti za matematiko in fiziko Univerze v Ljubljani.

Uspešni smo tudi na področju mednarodnega znanstvenega sodelovanja. V preteklem letu je bilo mednarodno sodelovanje razširjeno s štirimi novimi dvostranskimi projekti, tako da jih je skupaj teklo kar 15. Geografsko je dvostransko sodelovanje IMFM povezano s skupinami raziskovalcev iz Avstrije, Črne Gore, Kitajske, Rusije, Srbije, Turčije in Združenih držav Amerike.

Tudi v letu 2017 so se pod vodstvom prof. dr. Primoža Moravca vrstili

Matematični kolokviji, ki jih skupaj organizirajo DMFA, Oddelek za matematiko FMF UL in IMFM.

IMFM je finančno podprl konferenco »Linear Algebra Workshop – LAW'17«, ki je od 12. 06. 2017 do 16. 06. 2017 potekala na Fakulteti za matematiko in fiziko UL v Ljubljani, ter delavnico »Simbolna analiza podatkov – SDA 2017«, ki je od 12. 06. 2017 do 14. 06. 2017 potekala na Ekonomski fakulteti UL v Ljubljani. V okviru IMFM pa je v Dolenjskih Toplicah od 24. 03. 2017 do 28. 03. 2017 potekala tudi delavnica »Simetrije Grafov 2017«.

Jernej Kozak,
direktor IMFM

ODDELEK ZA MATEMATIKO

PROJEKTI

V letu 2017 smo člani oddelka delovali v okviru programskih skupin

Matej Brešar, *Algebre in kolobarji*, (P1-0288),

Franc Forstnerič, *Analiza in geometrija*, (P1-0291),

Dragan Marušič, *Algebra, diskretna matematika, verjetnostni račun in teorija iger*, (P1-0285),

Sandi Klavžar, *Teorija grafov*, (P1-0297),

Primož Moravec, *Algebra v teoriji operatorjev in finančna matematika*, (P1-0222),

Dušan Repovš, *Topologija, geometrija in nelinearna analiza*, (P1-0292),

in nadaljevali z delom pri naslednjih projektih:

J1-7110, *Sandi Klavžar*, Raziskovanje notranje strukture stolpnih grafov,

N1-0043, *Sandi Klavžar*, Kombinatorični problemi s poudarkom na igrah,

J1-7025, *Dušan Repovš*, Izbrani problemi nelinearne analize,

J1-7256, *Franc Forstnerič*, Interakcije med kompleksno analizo, minimalnimi ploskvami in parcialnimi diferencialnimi enačbami,

J1-6721, *Lyubomyr Zdomskyy*, Limitne množice iteracijskih sistemov v dimenzijah 3 in 4 (projekt zaključen v letu 2017).

Začeli smo z novimi projekti:

J1-8132, *Igor Klep*, Pozitivne preslikave in realna algebrična geometrija,

J1-8130, *Bojan Mohar*, Prekrižna števila in njihova uporaba,

N1-0057, *Janez Povh*, Visoko zmogljiv reševalec za binarne kvadratične probleme,

J1-8155, *Nataša Pržulj*, Zlivanje biomedicinskih podatkov z uporabo negativne matrične tri-faktorizacije,

N1-0064, *Vicentiu Radulescu*, Analiza zveznih in diskretnih matematičnih modelov v biologiji, kemiji in genetiki,

J1-8131, *Dušan Repovš*, Zvezni in diskretni sistemi v nelinearni analizi,

J1-8133, *Peter Šemrl*, Preslikave na matrikah in operatorjih.

Sodelovali smo v naslednjih mednarodnih projektih:

Sergio Cabello, *Geometrijsko definirani slučajni grafi* (slovensko–avstrijski projekt),

Barbara Drinovec Drnovšek, *Moderni vidiki kompleksne analize* (slovensko–črnogorski projekt),

Barbara Drinovec Drnovšek, *Holomorfne in kvazikonformne preslikave* (slovensko–srbski projekt),

Sandi Klavžar, *Igra dominacije in pakirno kromatično število* (slovensko–ameriški projekt),

Matjaž Konvalinka, *Lastnosti in uporabe prepletogramov* (slovensko–ameriški projekt),

Janko Marovt, *Kolobarji, ohranjevalci in aplikacije* (slovensko–turški projekt),

Giovanni Molica Bisci, *Končna asimptotična dimenzija in njene posplošitve* (slovensko–ameriški projekt),

Petar Pavešić, *Uporabna in računska algebraična topologija* (slovensko–srbski projekt),

Bor Plestenjak, *Učinkoviti algoritmi za večparametrične probleme lastnih vrednosti s tremi ali več parametri in njihova analiza* (slovensko–turški projekt),

Vicentiu Radulescu, *Limitne množice iterativnih sistemov v dimenzijah 3 in 4* (slovensko–ameriški projekt),

Dušan Repovš, *Geometrijske in topološke lastnosti Busemannovih prostоров* (slovensko–ameriški projekt).

ORGANIZACIJA MEDNARODNIH KONFERENC

Od 12. 6. 2017 do 16. 6. 2017 je na Fakulteti za matematiko in fiziko UL potekala mednarodna konferenca “8th Linear Algebra Workshop”. Od 12. 6. 2017 do 14. 6. 2017 je na Ekonomski fakulteti UL potekala mednarodna delavnica “6th Workshop on Symbolic Data Analysis”. Inštitut za matematiko, fiziko in mehaniko (IMFM) je obe konferenci finančno podprl.

MLADI RAZISKOVALCI

V okviru oddelka so se v letu 2017 usposabljali mladi raziskovalci:

Dejan Govc, mentor D. Repovš,
Barbara Ikica, mentor P. Šemrl,
Vesna Iršič, mentor S. Klavžar,
Michael Kaplin, mentor M. Kandič,
Tim Kos, mentor B. Brešar,
Tilen Marc, mentor S. Klavžar,
Micael Alexi Toledo Roy, mentor P. Potočnik,
Riccardo Ugolini, mentor F. Forstnerič,
Aljaž Zalar, mentor M. Brešar,

z doktoratom pa sta zaključila svoje usposabljanje:

Dejan Govc, mentor D. Repovš,
Aljaž Zalar, mentor M. Brešar.

BIBLIOGRAFIJE RAZISKOVALCEV

Jernej Azarija:

C1. — , M. A. Henning, S. Klavžar, *(Total) domination in prisms*, Electron. J. Combin. **24** (2017), art. P1.19, 11 str.

Iztok Banič:

B1. — , M. Črepnjak, M. Merhar, U. Milutinović, T. Sovič, *The closed subset theorem for inverse limits with upper semicontinuous bonding functions*, sprejeto v objavo v Bull. Malays. Math. Sci. Soc.

B2. — , M. Črepnjak, *Markov pairs, quasi Markov functions and inverse limits*, sprejeto v objavo v Houston J. Math.

C1. *Integrations on rings*, Open Math. **15** (2017), 365–373.

- C2. — , M. Črepnjak, M. Merhar, U. Milutinović, T. Sovič, *An Anderson-Choquet-type theorem and a characterization of weakly chainable continua*, *Mediterr. J. Math.* **14** (2017), 1–14.
- C3. — , A. Taranenko, *Measuring closeness of graphs - the Hausdorff distance*, *Bull. Malays. Math. Sci. Soc.* **40** (2017), 75–95.

Dominik Benkovič:

- B1. — , M. Grašič, *Generalized skew derivations on triangular algebras determined by action on zero products*, sprejeto v objavo v *Comm. Algebra*.
- I1. 3 recenzije za MathSciNet.
- I2. Ena recenzija za Zentralblatt MATH.
- I3. Mentorstvo pri enem magistrskem delu.

Janez Bernik:

- B1. — , K. Šivic, *On certain graded representations of filiform Lie algebras*, sprejeto v objavo v *Linear Multilinear Algebra*.
- I1. Mentorstvo pri 2 magistrskih delih.

Drago Bokal:

- C1. — , A. Goričan, *Operations research as the bridge over technological valley of death*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 73-78.
- C2. A. Goričan, A. Bratuša, — , *Knowledge transfer ontology of photovoltaic electricity production forecasting*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 91–96.
- C3. *Optimizing enjoyment of mathematics and OR education with introducing psychological concepts flow and grit using simulation-based model of emotional states of learning. technology readiness levels*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 549–554.
- C4. M. Krajncič, T. Marčec, A. Breznik, S. Klampfer, — , A. Chowdhury, *Monte Carlo metoda za ugotavljanje odvisnosti razpoložljivosti klicne*

- storitve od števila telekomunikacijskih linij*, 26. mednarodna Elektrotehniška in računalniška konferenca, Portorož, september 2017, Zbornik šestindvajsete mednarodne Elektrotehniške in računalniške konference ERK 2017, 449–452.
- C5. D. S. Archdeacon, — , T. Gologranc, *A characterization of plane Gauss paragraphs*, *Ars Math. Contemp.* **12** (2017), 31–36.
- C6. N. Bašić, — , T. Boothby, J. Rus, *An algebraic approach to enumerating non-equivalent double traces in graphs*, *MATCH Commun. Math. Comput. Chem.* **78** (2017), 581–594.
- G1. *Knowledge transfer ontology of photovoltaic electricity production forecasting*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- G2. *Operations research as the bridge over technological valley of death*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- G3. *Optimizing enjoyment of mathematics and OR education with introducing psychological concepts flow and grit using simulation-based model of emotional states of learning. technology readiness levels*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- G4. *Monte Carlo metoda za ugotavljanje odvisnosti razpoložljivosti klicne storitve od števila telekomunikacijskih linij*, 26. mednarodna Elektrotehniška in računalniška konferenca, Portorož, september 2017.
- H1. D. Zlodej, — , *Optimalno zaporedje investicij v energetske prenove stavb*, *Dianoia* **1** (2017), št. 1, 22–27.
- H2. S. Šmigoc, — , M. Delčnjak, A. Veber-Horvat, Ž. Povalej, *Napovedovanje izgub električne energije v slovenskem distribucijskem omrežju*, *Dianoia* **1** (2017), št. 1, 28–34.
- H3. T. Marčec, M. Krajncič, — , A. Breznik, P. Podbreznik, A. Chowdhury, *Odkrivanje odstopanj od normiranega ravnanja anomalije s študentskimi boni*, *Dianoia* **1** (2017), št. 2, 91–98.
- H4. A. Goričan, — , *Razvrščanje sončnih elektra*, *Dianoia* **1** (2017), št. 2, 99–107.
- II. Mentorstvo pri eni doktorski disertaciji in eni magistrski nalogi.
- II. Glavni urednik fakultetne revije *Dianoia*.

Boštjan Brešar:

- C1. J. Ferme, —, *Teorija grafov v srednješolskem izobraževanju = Graph theory in secondary education*, 3. mednarodna konferenca o učenju in poučevanju matematike, Brdo pri Kranju, november 2016, Zbornik izbranih prispevkov, 215–224.
- C2. *Improving the Clark-Suen bound on the domination number of the Cartesian product of graphs*, *Discrete Math.* **340** (2017), 2398–2401.
- C3. —, C. Bujtás, T. Gologranc, S. Klavžar, G. Košmrlj, B. Patkós, Z. Tuza, M. Vizer, *Grundy dominating sequences and zero forcing sets*, *Discrete Optim.* **26** (2017), 66–77.
- C4. —, P. Dorbec, S. Klavžar, G. Košmrlj, *How long can one bluff in the domination game?*, *Discuss. Math. Graph Theory* **37** (2017), 337–352.
- C5. —, B. L. Hartnell, D. F. Rall, *Uniformly dissociated graphs*, *Ars Math. Contemp.* **13** (2017), 293–306.
- C6. —, M. A. Henning, *The game total domination problem is log-complete in PSPACE*, *Inform. Process. Lett.* **126** (2017), 12–17.
- C7. —, S. Klavžar, D. F. Rall, K. Wash, *Packing chromatic number under local changes in a graph*, *Discrete Math.* **340** (2017), 1110–1115.
- C8. —, S. Klavžar, D. F. Rall, K. Wash, *Packing chromatic number, $(1, 1, 2, 2)$ -colorings, and characterizing the Petersen graph*, *Aequationes Math.* **91** (2017), 169–184.
- D1. Področni urednik revije *Discrete Mathematics and Theoretical Computer Science*.
- D2. Član uredniškega odbora revije *Discussiones Mathematicae Graph Theory*.
- E1. Član programskega sveta konference *Conference on Algorithms and Discrete Applied Mathematics (CALDAM 2017)*, Goa, Indija, februar 2017.
- E2. Član programskega in organizacijskega odbora konference *30th Ljubljana-Leoben Graph Theory Seminar*, Maribor, september 2017.
- F1. *Packing colorings of subcubic graphs*, vabljen predavanje, Workshop on graph colorings, Plzen, Češka, februar 2017.
- F2. *Dominating sequences and related graph invariants*, vabljen predavanje, 26th Workshop '3in1', Dosłoińce, Poljska, oktober 2017.
- G1. *On Vizing's conjecture*, 17th Workshop on Graph Theory: Colourings, Independence and Domination, Piechowice, Poljska, september 2017.

G2. *Convex and isometric domination of classes of (chordal) graphs*, 20th Workshop on Hereditary Graph Properties, Piechowice, Poljska, september 2017.

I1. 5 recenzij za MathScieNet.

Matej Brešar:

B1. —, X. Guo, G. Liu, R. Lu, K. Zhao, *Zero product determined Lie algebras*, sprejeto v objavo v Eur. J. Math.

B2. —, C. Hanselka, I. Klep, J. Volčič, *Skolem-Noether algebras*, sprejeto v objavo v J. Algebra.

C1. J. Alaminos, —, J. Extremera, A. R. Villena, *R. Zero Lie product determined Banach algebras*, Studia Math. **239** (2017), 189–199.

C2. *Derivations of tensor products of nonassociative algebras*, Linear Algebra Appl. **530** (2017), 244–252.

D1. Član uredniškega odbora revije *Communications in Algebra*.

D2. Član uredniškega odbora revije *Linear Algebra and its Applications*.

D3. Član uredniškega odbora revije *Mathematica Pannonica*.

Sergio Cabello Justo:

C1. K. Bringmann, —, M. Emmerich, *Maximum volume subset selection for anchored boxes*, 33rd International Symposium on Computational Geometry, Brisbane, Avstralija, julij 2017, SoCG 2017 (Leibniz international proceedings in informatics, 77), 15 str.

C2. B. Burton, —, S. Kratsch, W. Pettersson, *The parameterized complexity of finding a 2-sphere in a simplicial complex*, 34th Symposium on Theoretical Aspects of Computer Science, Hannover, Nemčija, marec 2017, STACS 2017 (Leibniz international proceedings in informatics, 66), 14 str.

C3. *Subquadratic algorithms for the diameter and the sum of pairwise distances in planar graphs*, 28th ACM-SIAM Symposium on Discrete Algorithms, Barcelona, Španija, januar 2017, Conference Proceedings (Proceedings of the annual ACM-SIAM Symposium on Discrete Algorithms), 2143–2152.

C4. —, J. Cibulka, J. Kynčl, M. Saumell, P. Valtr, *Peeling potatoes near-optimally in near-linear time*, SIAM J. Comput. **46** (2017), 1574–1602.

- C5. — , M. Ježič, *Refining the hierarchies of classes of geometric intersection graphs*, *Electron. J. Combin.* **24** (2017), 1–19.
- C6. H. Alt, — , P. Giannopoulos, C. Knauer, *Minimum cell connection in line segment arrangements*, *Internat. J. Comput. Geom. Appl.* **27** (2017), 159–176.
- D1. Član uredniškega odbora revije revije *Journal of Computational Geometry*.
- D2. Član uredniškega odbora revije revije *SIAM Journal on Discrete Mathematics*.
- E1. Član programskega odbora konference *43rd International Conference on Current Trends in Theory and Practice of Computer Science (SOFSSEM 2017)*, Limerick, Irska, januar 2017.
- E2. Član programskega odbora konference *33rd European Workshop on Computational Geometry (EuroCG 2017)*, Malmö, Švedska, april 2017.
- E3. Predsednik programskega odbora konference *7th Spanish Meeting on Computational Geometry*, Alicante, Španija, junij 2017.
- E4. Član programskega odbora konference *14th International Symposium on Operations Research in Slovenia (SOR 2017)*, Bled, september 2017.
- F1. *Two problems in geometric optimization*, vabljeno predavanje, 2nd Aslla Symposium “Space Tessellation and Packing: Theory and Applications”, Gangneung, Južna Koreja, september 2017.
- G1. *Subquadratic algorithms for the diameter and the sum of pairwise distances in planar graphs*, 28th ACM-SIAM Symposium on Discrete Algorithms, Barcelona, Španija, januar 2017.
- G2. *Subquadratic algorithms for the diameter and the sum of pairwise distances in planar graphs*, FoCM 2017, Workshop: Graph Theory and Combinatorics, Barcelona, Španija, julij 2017.
- I1. Mentorstvo pri enem magistrskem delu.

Matija Cencelj:

- B1. — , J. Dydak, A. Vavpetič, *Asymptotic dimension of coarse spaces via maps to simplicial complexes*, sprejeto v objavo v *Topology Appl.*
- C1. — , U. H. Karimov, D. Repovš, *On the Alexandroff-Borsuk problem*, *Topology Appl.* **221** (2017), 114–120.

- G1. *Gropes and their fundamental groups*, Geometric Topology and Geometry of Banach Spaces, Eilat, Izrael, maj 2017.

Jakob Cimprič:

- B1. *A nullstellensatz for linear partial differential equations with polynomial coefficients*, sprejeto v objavo v Multidimensional Syst. Signal Process.
- C1. *Archimedean classes of matrices over ordered fields*, J. Algebra Comput. Appl. **6** (2017), 1–15.
- G1. *A nullstellensatz for differential operators*, Sums of Squares – Real Algebraic Geometry and its Applications, Innsbruck, Avstrija, avgust 2017.
- I1. Soavtor enega univerzitetnega učbenika.
- I2. Mentorstvo pri eni doktorski disertaciji.

Karin Cvetko Vah:

- C1. K. Cvetko-Vah, M. Sadrzadeh, D. Kartsaklis, B. Blundell, *Non-commutative logic for compositional distributional semantics*, 24th Workshop on Logic, Language, Information and Communication, WoLLIC, London, Velika Britanija, julij 2017, Logic, language, information, and computation, 110–124.
- C2. *On skew Heyting algebras*, Ars Math. Contemp. **12** (2017), 37–50.
- D1. Članica uredniškega odbora revije *Open Mathematics*.
- G1. *Non-commutative logic for compositional distributional semantics*, 24th Workshop on Logic, Language, Information and Communication, WoLLIC, London, Velika Britanija, julij 2017.

Miran Černe:

- B1. *Nonlinear Riemann-Hilbert problems for quasilinear $\bar{\partial}$ -equations on the unit disc*, sprejeto v objavo v Complex Var. Elliptic Equ.
- F1. *Beurling's boundary differential relations on multiply connected domains*, vabljeno predavane, Universidad de la Laguna, San Cristóbal de La Laguna, Tenerife, Španija, maj 2017.

- I1. Urednik zbirke *Matematika-fizika*, področje *Matematika* pri DMFA-založništvu.

Andrej Dobrovoljc:

- C1. — , D. Trček, B. Likar, *Predicting exploitations of information systems vulnerabilities through attackers' characteristics*, *IEEE Access* **5** (2017), 26063-26075.
- G1. *Center razvoja, raziskav in inovacij JV Slovenije*, Dan avtomatike in robotike, Novo mesto, april 2017.
- G2. *Kolaborativni roboti trkajo na vrata podjetij*, Dan avtomatike in robotike, Novo mesto, april 2017.
- H1. F. Bratkovič, — , J. Povh, *Center razvoja, raziskav in inovacij JV Slovenije*, Dan avtomatike in robotike, Novo mesto, april 2017, 25 let industrijske robotike v jugovzhodni Sloveniji in Posavju, 108–112.
- H2. — , K. Mihalič, F. Bratkovič, J. Povh, *Kolaborativni roboti trkajo na vrata podjetij*, Dan avtomatike in robotike, Novo mesto, april 2017, 25 let industrijske robotike v jugovzhodni Sloveniji in Posavju, 113–117.
- I1. Mentorstvo pri 3 diplomskih nalogah.

Gregor Dolinar:

- B1. — , B. Kuzma, J. Marovt, *A note on commutativity preserving maps on $M_n(\mathbb{R})$* , sprejeto v objavo v *Oper. Matrices*.
- B2. — , B. Kuzma, N. Stopar, *Characterization of orthomaps on the Cayley plane*, sprejeto v objavo v *Aequationes Math.*
- C1. H. F. Da Cruz, — , R. Fernandes, B. Kuzma, *Maximal doubly stochastic matrix centralizers*, *Linear Algebra Appl.* **532** (2017), 387–396.
- C2. — , B. Kuzma, J. Marovt, *Lie product preserving maps on $M_n(\mathbb{F})$* , *Filomat* **31** (2017), 5335–5344.
- D1. Član uredniškega odbora revije *Mathematica Slovaca*.
- D2. Član uredniškega odbora revije *Matematika i Informatika*.
- G1. *Maximal doubly stochastic matrix centralizers*, *Preservers Everywhere*, Szeged, Madžarska, junij 2017.

David Dolžan:

- C1. — , D. Kokol-Bukovšek, B. Kuzma, *On diameter of components in commuting graphs*, Linear Algebra Appl. **522** (2017), 161–174.
- C2. — , P. Oblak, *The total graphs of finite commutative semirings*, Results Math. **72** (2017), 193–204.

Oliver Dragičević:

- C1. A. Carbonaro, — , *Functional calculus for generators of symmetric contraction semigroups*, Duke Math. J. **166** (2017), 937–974.
- F1. *p-ellipticity*, vabljeno predavanje, 28th International Workshop on Operator Theory and Applications (IWOTA), Chemnitz, Nemčija, avgust 2017.
- G1. *p-ellipticity*, XXXVII Convegno nazionale di Analisi Armonica, Bresanone, Italija, maj 2017.

Barbara Drinovec Drnovšek:

- B1. A. Alarcón, — , F. Forstnerič, F. J. López, *Minimal surfaces in minimally convex domains*, sprejeto v objavo v Trans. Amer. Math. Soc.
- G1. *Minimal hulls and minimally convex domains*, 19th ÖMG Congress and Annual DMV Meeting, Salzburg, Avstrija, september 2017.

Roman Drnovšek:

- B1. *On algebras generated by positive operators*, sprejeto v objavo v Positivity.
- B2. — , M. Kandić, *Positive operators as commutators of positive operators*, sprejeto v objavo v Studia Math.
- B3. *On order automorphisms of the effect algebra*, sprejeto v objavo v Acta Sci. Math. (Szeged).
- C1. *Triangularizability of trace-class operators with increasing spectrum*, J. Math. Anal. Appl. **447** (2017), 1102–1115.
- D1. Član uredniškega odbora revije *Advances in Operator Theory*.
- D2. Član uredniškega odbora revije *Journal of Mathematical Analysis*.

G1. *Triangularizability of trace-class operators with increasing spectrum*, Positivity IX, Edmonton, Kanada, julij 2017.

I1. Mentorstvo pri 4 delih diplomskega seminarja.

Daniel Eremita:

B1. *Biderivations on tensor products of algebras*, sprejeto v objavo v Comm. Algebra.

C1. *Biderivations of triangular rings revisited*, Bull. Malays. Math. Sci. Soc. **40** (2017), 505–522.

C2. *Commuting traces of upper triangular matrix rings*, Aequationes Math. **91** (2017), 563–578.

Gašper Fijavž:

C1. J. M. Alam, S. Chaplick, — , M. Kaufmann, S. G. Kobourov, S. Pupyrev, J. Toeniskoetter, *Threshold-coloring and unit-cube contact representation of planar graphs*, Discrete Appl. Math. **216** (2017), 2–14.

G1. *Personal side of doing mathematics with Bojan Mohar*, 9th Crossing Numbers Workshop, Osnabrück, Nemčija, maj 2017.

I1. Avtor druge izdaje univerzitetnega učbenika.

Franc Forstnerič:

A1. *Stein manifolds and holomorphic mappings : the homotopy principle in complex analysis*, Springer, Cham, Švica, 2017.

B1. A. Alarcón, B. Drinovec-Drnovšek, — , F. J. López, *Minimal surfaces in minimally convex domains*, sprejeto v objavo v Trans. Amer. Math. Soc.

B2. A. Alarcón, — , F. J. López, *New complex analytic methods in the study of non-orientable minimal surfaces in \mathbb{R}^n* , sprejeto v objavo v Mem. Amer. Math. Soc.

B3. A. Alarcón, — , *Darboux charts around holomorphic Legendrian curves and applications*, sprejeto v objavo v Internat. Math. Res. Notices.

- B4. A Alarcón, — , F. J. López, *Every meromorphic function is the Gauss map of a conformal minimal surface*, sprejeto v objavo v J. Geom. Anal.
- B5. — , F. Lárusson, *The Oka principle for holomorphic Legendrian curves in \mathbb{C}^{2n+1}* , sprejeto v objavo v Math. Z.
- B6. A. Alarcón, — , *Complete densely embedded complex lines in \mathbb{C}^2* , sprejeto v objavo v Proc. Amer. Math. Soc.
- B7. *Proper holomorphic immersions into Stein manifolds with the density property*, sprejeto v objavo v J. Anal. Math.
- B8. *Divisors defined by noncritical functions*, sprejeto v objavo v Proc. Amer. Math. Soc.

- C1. *Surjective holomorphic maps onto Oka manifolds*, INdAM Meeting “Complex and Symplectic Geometry”, Cortona, Italija, junij 2016, Complex and symplectic geometry (Springer INdAM series, 21), 73–84. Springer Cham Švica 2017
- C2. A. Alarcón, — , F. J. López, *Holomorphic Legendrian curves*, Compos. Math. **153** (2017), 1945–1986.
- C3. *Hyperbolic complex contact structures on \mathbb{C}^{2n+1}* , J. Geom. Anal. **27** (2017), 3166–3175.

- D1. Član uredniškega odbora revije *International journal of mathematics*.

- F1. *Universidad de Granada*, vabljen predavanje, Universidad de Granada, Granada, Španija, januar 2017.
- F2. *Complete bounded submanifolds in different geometries*, vabljen predavanje, Varietà reali e complesse: geometria, topologia e analisi armonica, Pisa, Italija, februar 2017.
- F3. *Trinity College*, vabljen predavanje, Trinity College, School of Mathematics, Dublin, Irska, marec 2017.
- F4. *Holomorphic Legendrian curves*, vabljen predavanje, University of Adelaide, Avstralija, maj 2017.
- F5. *Holomorphic Legendrian curves*, vabljen predavanje, Conference on Complex Geometry, Dynamical Systems and Foliation Theory, Singapur, maj 2017.
- F6. *Holomorphic Legendrian curves and Darboux charts*, vabljen predavanje, Conference on “Complex Analysis and Geometry - XXIII”, Levico Terme (Trento), Italija, junij 2017.
- F7. *Geburtstags von Otto Forster*, vabljen predavanje, Ludwig Maximilians-Universität München, Nemčija, julij 2017.
- F8. *Proper holomorphic immersions and embeddings of Stein manifolds*

into Stein manifolds with the density property, vabljeno predavanje, 12th Korean Conference on Several Complex Variables (KSCV12), Gyeong-Ju, Južna Koreja, julij 2017.

- F9. *Proper holomorphic immersions and embeddings of Stein manifolds into Stein manifolds with the density property*, vabljeno predavanje, International Conference on Complex Analysis Dedicated to the memory of Andrei Gonchar and Anatolij Vitushkin, Moskva, Rusija, oktober 2017.
- F10. *Recent applications of complex analysis to the theory of minimal surfaces*, vabljeno predavanje, Moskovskij gosudarstvennyj universitet imeni M. V. Lomonosova, Moskva, Rusija, oktober 2017.
- F11. *Divisors defined by noncritical functions*, vabljeno predavanje, Norwegian University of Science and Technology (NTNU), Trondheim, Norveška, oktober 2017.
- F12. *A properly embedded holomorphic disc in the ball with finite area and dense boundary curve*, vabljeno predavanje, Complex Geometry for Serguei Ivashkovych's 60th anniversary, Lille, Francija, november 2017.

Maja Fošner:

- B1. —, N. ur Rehman, —, T. Bano, *A note on generalized derivations on prime rings*, sprejeto v objavo v Arab. J. Math. (Springer).
- C1. B. Rupnik, B. Marcen, T. Kramberger, B. Rosi, —, *Optimizing sterilization logistics in General Hospital Izola (SBI - Splošna bolnišnica Izola)*, 22nd International Conference on "Material Handling, Constructions and Logistics", Beograd, Srbija, oktober 2017, MHCL 2017, 165–172.
- G1. *Optimizing sterilization logistics in General Hospital Izola (SBI - Splošna bolnišnica Izola)*, 22nd International Conference on "Material Handling, Constructions and Logistics", Beograd, Srbija, oktober 2017.

Josip Globevnik:

- B1. —, D. Kalaj, *On holomorphic functions with cluster sets of finite linear measure*, sprejeto v objavo v Math. Z.
- C1. A. Alarcón, —, *Complete embedded complex curves in the ball of \mathbb{C}^2 can have any topology*, Anal. PDE **10** (2017), 1987–1999.

- F1. *Complete complex hypersurfaces in the ball of \mathbb{C}^N* , vabljeno predavanje, Matematički institut SANU, Beograd, Srbija, september 2017.

Tanja Golgranc:

- B1. —, M. Jakovac, I. Peterin, *The security number of lexicographic products*, sprejeto v objavo v Quaest. Math.
- C1. D. S. Archdeacon, D. Bokal, —, *A characterization of plane Gauss paragraphs*, Ars Math. Contemp. **12** (2017), 31–36.
- C2. B. Brešar, C. Bujtás, —, S. Klavžar, G. Košmrlj, B. Patkós, Z. Tuza, M. Vizer, *Grundy dominating sequences and zero forcing sets*, Discrete Optim. **26** (2017), 66–77.
- C3. —, P. Repolusk, *Toll number of the Cartesian and the lexicographic product of graphs*, Discrete Math. **340** (2017), 2488–2498.
- D1. Sourednica zbornika *30th Ljubljana - Leoben Graph Theory Seminar*, Maribor, september 2017.
- G1. *Toll number of the Cartesian and lexicographic product of graphs*, 2nd Malta Conference in Graph Theory and Combinatorics (MCGTC-2017), Qawra, Malta, junij 2017.
- G2. *Grundy dominating sequences and zero forcing sets*, Groups and Graphs, Metrics and Manifolds (G2M2), Jekaterinburg, Rusija, julij 2017.
- I1. 9 recenzij za MathSciNet.
- I2. Mentorstvo pri dveh seminarskih nalogah.

Dejan Govc:

- A1. *Unimodal category*, doktorska disertacija, Univerza v Ljubljani, Fakulteta za matematiko in fiziko, Oddelek za matematiko, Matematika - 3. stopnja, Ljubljana, 2017.
- B1. —, P. Škraba, *An approximate nerve theorem*, sprejeto v objavo v Found. Comput. Math.
- G1. *An approximate nerve theorem*, Applied Topology, Będlewo, Poljska, junij 2017.

Mateja Grašič:

- B1. D. Benkovič, — , *Generalized skew derivations on triangular algebras determined by action on zero products*, sprejeto v objavo v Comm. Algebra.
- G1. *Zero product determined algebras*, Groups and Graphs, Metrics and Manifolds (G2M2), Jekaterinburg, Rusija, julij 2017.
- I1. 4 recenzije za MathSciNet.
- I2. Mentorstvo pri enem magistrskem delu.

Andreas Hinz:

- C1. *The Lichtenberg sequence*, Fibonacci Quart. **55** (2017), 2–12.
- C2. — , S. Klavžar, S. S. Zemljčič, *A survey and classification of Sierpiński-type graphs*, Discrete Appl. Math. **217** (2017), 565–600.

Barbara Ikica:

- C1. D. Dimitrov, — , R. Škrekovski, *Remarks on maximum atom-bond connectivity index with given graph parameters*, Discrete Appl. Math. **222** (2017), 222–226.
- C2. D. Dimitrov, — , R. Škrekovski, *Remarks on the Graovac-Ghorbani index of bipartite graphs*, Appl. Math. Comput. **293** (2017), 370–376.

Vesna Iršič:

- A1. *Pokrivanje vozlišč grafov z najkrajšimi potmi*, magistrsko delo, Univerza v Ljubljani, Fakulteta za matematiko in fiziko, Oddelek za matematiko, Matematika - 2. stopnja, Ljubljana, 2017.

Marko Jakovac:

- B1. T. Gologranc, — , I. Peterin, *The security number of lexicographic products*, sprejeto v objavo v Quaest. Math.
- B2. — , I. Peterin, *The b-chromatic number – a survey*, sprejeto v objavo v Discrete Appl. Math.

- C1. I. G. Yero, — , D. Kuziak, *On global (strong) defensive alliances in some product graphs*, Commun. Comb. Optim. **2** (2017), 21–33.
- D1. Sourednik zbornika *30th Ljubljana - Leoben Graph Theory Seminar*, Maribor, september 2017.
- E1. Član organizacijskega odbora konference *30th Ljubljana - Leoben Graph Theory Seminar*, Maribor, september 2017.
- F1. *Secure sets in graphs*, vabljen predavanje, DIMAT Workshop, Veszprém, Madžarska, maj 2017.
- H1. *Rubikovo maščevanje : algoritem za reševanje Rubikove kocke $4 \times 4 \times 4$* , Presek **45** (2017/2018), št. 1/2, 22–29/24–20.
- I1. 5 recenzij za MathSciNet.
- I2. Mentorstvo pri 2 bolonjskih magisterijih.

Aleksandar Jurišić:

- B1. — , J. Vidali, *The Sylvester graph and Moore graphs*, sprejeto v objavo v European J. Combin.
- C1. — , J. Vidali, *Restrictions on classical distance-regular graphs*, J. Algebraic Combin. **46** (2017), 571–588.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.

Marko Kandić:

- B1. — , H. Li, V. G. Troitsky, *Unbounded norm topology beyond normed lattices*, sprejeto v objavo v Positivity.
- B2. R. Drnovšek, — , *Positive operators as commutators of positive operators*, sprejeto v objavo v Studia Math.
- C1. — , M. A. A. Marabeh, V. G. Troitsky, *Unbounded norm topology in Banach lattices*, J. Math. Anal. Appl. **451** (2017), 259–279.
- C2. — , K. Šivic, *On the dimension of the algebra generated by two positive semi-commuting matrices*, Linear Algebra Appl. **512** (2017), 136–161.
- C3. — , K. Šivic, *On the positive commutator in the radical*, Positivity **21** (2017), 99–111.
- G1. *Unbounded norm topology*, Positivity IX, Edmonton, Kanada, julij 2017.

Sandi Klavžar:

- C1. *Selected problems on domination game*, Workshop on Graph and Hypergraph Domination, Balatonalmádi, Madžarska, junij 2017, Problem booklet, 9–13.
- C2. S. Alikhani, D. Fatehi, — , *On the structure of dominating graphs*, Graphs Combin. **33** (2017), 665–672.
- C3. J. Azarija, M. A. Henning, — , *(Total) domination in prisms*, Electron. J. Combin. **24** (2017), art. P1.19, 11 str.
- C4. B. Brešar, C. Bujtás, T. Gologranc, — , G. Košmrlj, B. Patkós, Z. Tuza, M. Vizer, *Grundy dominating sequences and zero forcing sets*, Discrete Optim. **26** (2017), 66–77.
- C5. B. Brešar, P. Dorbec, — , G. Košmrlj, *How long can one bluff in the domination game?*, Discuss. Math. Graph Theory **37** (2017), 337–352.
- C6. B. Brešar, — , D. F. Rall, K. Wash, *Packing chromatic number under local changes in a graph*, Discrete Math. **340** (2017), 1110–1115.
- C7. B. Brešar, — , D. F. Rall, K. Wash, *Packing chromatic number, $(1, 1, 2, 2)$ -colorings, and characterizing the Petersen graph*, Aequationes Math. **91** (2017), 169–184.
- C8. M. A. Henning, — , D. F. Rall, *The $4/5$ upper bound on the game total domination number*, Combinatorica **37** (2017), 223–251.
- C9. A. M. Hinz, — , S. S. Zemljčič, *A survey and classification of Sierpiński-type graphs*, Discrete Appl. Math. **217** (2017), 565–600.
- C10. — , H. Liu, P. Singh, K. Xu, *Constructing almost peripheral and almost self-centered graphs revisited*, Taiwanese J. Math. **21** (2017), 705–717.
- C11. — , I. Peterin, I. G. Yero, *Graphs that are simultaneously efficient open domination and efficient closed domination graphs*, Discrete Appl. Math. **217** (2017), 613–621.
- C12. P. Manuel, — , A. Xavier, A. Arokiaraj, E. Thomas, *Strong edge geodesic problem in networks*, Open Math. **15** (2017), 1225–1235.
- C13. Z. Shao, — , Z. Li, P. Wu, J. Xu, *On the signed Roman k -domination: complexity and thin torus graphs*, Discrete Appl. Math. **233** (2017), 30–40.
- D1. Urednik revije *Ars Mathematica Contemporanea*.
- D2. Urednik revije *The Art of Discrete and Applied Mathematics*.
- D3. Urednik revije *Asian-European Journal of Mathematics*.
- D4. Urednik revije *Bulletin of the Malaysian Mathematical Sciences Society*.
- D5. Urednik revije *Discrete Applied Mathematics*.
- D6. Področni urednik revije *Discussiones Mathematicae Graph Theory*.

- D7. Član uredniškega odbora revije *European Journal of Combinatorics*.
- D8. Član uredniškega odbora revije *Graphs and Combinatorics*.
- D9. Član uredniškega odbora revije *Iranian Journal of Mathematical Chemistry*.
- D10. Član uredniškega odbora revije *Iranian Journal of Mathematical Sciences and Informatics*.
- D11. Član uredniškega odbora revije *Kragujevac Journal of Mathematics*.
- D12. Član uredniškega odbora revije *MATCH Communications in Mathematical and in Computer Chemistry*.
- E1. Član programskega odbora konference *Algorithms and Discrete Applied Mathematics - Third International Conference, CALDAM 2017*, Sancoale, Goa, Indija, februar 2017.
- F1. *Selected problems on domination game*, vabljeno predavanje, Workshop on Graph and Hypergraph Domination, Balatonalmádi, Madžarska, junij 2017.
- F2. *Packing chromatic number*, vabljeno predavanje, 2nd Malta Conference in Graph Theory and Combinatorics, Qawra, Malta, junij 2017.
- F3. *Different aspects of the Tower of Hanoi game*, vabljeno predavanje, Università degli studi di Trieste, Trst, Italija, september 2017.
- F4. *Packing chromatic number*, vabljeno predavanje, International Conference on Recent Trends In Graphs & Networks (ICRTGN 2017), Kerala, Indija, oktober/november 2017.
- F5. *Domination and total domination game*, vabljeno predavanje, International Conference on Mathematical Computer Engineering (ICMCE-2017), Chennai, Indija, november 2017.
- G1. *Independence and packing chromatic number of Mycielski graphs*, 17th Workshop on Graph Theory: Colourings, independence and domination, Piechowice, Poljska, september 2017.

Igor Klep:

- B1. M. Augat, J. W. Helton, — , S. McCullough, *Bianalytic maps between free spectrahedra*, sprejeto v objavo v Math. Ann.
- B2. J. W. Helton, — , S. McCullough, M. Schweighofer, *Dilations, linear matrix inequalities, the matrix cube problem and beta distributions*, sprejeto v objavo v Mem. Amer. Math. Soc.
- B3. E. Evert, J. W. Helton, — , S. McCullough, *Extreme points of matrix convex sets, free spectrahedra and dilation theory*, sprejeto v objavo v

- J. Geom. Anal.
- B4. *The real spectrum of a noncommutative ring and the Artin-Lang homomorphism theorem*, sprejeto v objavo v *Algebr. Represent. Theory*.
- B5. M. Brešar, C. Hanselka, —, J. Volčič, *Skolem-Noether algebras*, sprejeto v objavo v *J. Algebra*.
- B6. —, S. McCullough, K. Šivic, A. Zalar, *There are many more positive maps than completely positive maps*, sprejeto v objavo v *Int. Math. Res. Not. IMRN*.
- C1. J. W. Helton, —, S. McCullough, *The tracial Hahn-Banach theorem, polar duals, matrix convex sets, and projections of free spectrahedra*, *J. Eur. Math. Soc. (JEMS)* **19** (2017), 1845–1897.
- C2. E. Evert, J. W. Helton —, S. McCullough, *Circular free spectrahedra*, *J. Math. Anal. Appl.* **445** (2017), 1047–1070.
- C3. —, J. E. Pascoe, J. Volčič, *Regular and positive noncommutative rational functions*, *J. Lond. Math. Soc. (2)* **95** (2017), 613–632.
- C4. —, Š. Špenko, *Free function theory through matrix invariants*, *Canad. J. Math.* **69** (2017), 408–433.
- C5. —, V. Vinnikov, J. Volčič, *Null- and Positivstellensätze for rationally resolvable ideals*, *Linear Algebra Appl.* **527** (2017), 260–293.
- C6. —, J. Volčič, *Free loci of matrix pencils and domains of noncommutative rational functions*, *Comment. Math. Helv.* **92** (2017), 105–130.
- D1. Član uredniškega odbora revije *Complex Analysis and Operator Theory*.
- E1. Podpredsednik organizacijskega odbora konference *28th International Workshop on Operator Theory and Applications (IWOTA)*, Chemnitz, Nemčija, avgust 2017.
- F1. *Positive polynomials and the universal Procesi-Schacher conjecture*, Algebra and Number Theory Seminar, University College Dublin, Irska, marec 2017.
- F2. *Elliptische lineare Matrixpolynome*, Reelle Algebra und Geometrie Seminar, Universität Konstanz, Nemčija, juni 2017.
- F3. *Free Real Algebraic Geometry*, plenarno predavanje, Real Algebraic Geometry With a View Toward Moment Problems and Optimization, Oberwolfach, Nemčija, marec 2017.
- F4. *Loci of linear matrix pencils*, vabljeno predavanje, Sums of Squares – Real Algebraic Geometry and its Applications, Innsbruck, Avstrija, avgust 2017.

- I1. Nagrada New Zealand Mathematical Society za raziskovalno delo.
- I2. Mentorstvo pri eni in somentorstvo pri eni doktorski disertaciji.

Marjetka Knez:

- C1. *Interpolation with spatial rational Pythagorean-hodograph curves of class 4*, Comput. Aided Geom. Design **56** (2017), 16–34.
- F1. *Dual approach to rational curves with Pythagorean properties*, vabljeno plenarno predavanje, Conference on Geometry: Theory and Applications, Plzeň, Češka, junij 2017.
- G1. *Interpolation with spatial rational Pythagorean-hodograph curves of degree 6*, 2nd Conference on Subdivision, Geometric and Algebraic Methods, Isogeometric Analysis and Refinability in Italy – SMART 2017, Gaeta, Italija, september 2017.
- I1. Mentorstvo pri 2 magisterijih in 1 diplomskem seminarju.

Damjana Kokol-Bukovšek:

- C1. D. Dolžan, —, B. Kuzma, *On diameter of components in commuting graphs*, Linear Algebra Appl. **522** (2017), 161–174.
- C2. —, M. Omladič, *Linear spaces of symmetric nilpotent matrices*, Linear Algebra Appl. **530** (2017), 384–404.
- C3. —, B. Mojškerč, *Jordan triple product homomorphisms on Hermitian matrices of dimension two*, Publ. Math. Debrecen **90** (2017), 227–250.
- E1. Članica organizacijskega odbora konference 8th *Linear Algebra Workshop*, Ljubljana, junij 2017.
- G1. *Jordan triple product homomorphisms on triangular matrices to and from dimension one*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G2. *Linear spaces of symmetric nilpotent matrices*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G3. *Jordan triple product homomorphisms on triangular matrices to and from dimension one*, MAT TRIAD 2017 - International Conference on MATRIX Analysis and its Applications., Będlewo, Poljska, september 2017.

G4. *Linear spaces of symmetric nilpotent matrices*, MAT TRIAD 2017 - International Conference on MATRIX Analysis and its Applications., Będlewo, Poljska, september 2017.

I1. Soavtorstvo pri enem univerzitetnem učnem gradivu.

Tim Kos:

B1. B. Brešar, T. R. Hartinger, — , M. Milanič, *On total domination in the Cartesian product of graphs*, sprejeto v objavo v Discuss. Math. Graph Theory.

B2. B. Brešar, — , G. Nasini, P. Torres, *Total dominating sequences in trees, split graphs, and under modular decomposition*, sprejeto v objavo v Discrete Optim.

B3. B. Brešar, T. R. Hartinger, — , M. Milanič, *1-perfectly orientable K_4 -minor-free and outerplanar graphs*, sprejeto v objavo v Discrete Appl. Math.

E1. Član organizacijskega odbora konference 30th Ljubljana - Leoben Graph Theory Seminar, Maribor, september 2017.

G1. *Grundy total domination number of bipartite k -regular graphs*, 30th Ljubljana - Leoben Graph Theory Seminar, Maribor, september 2017.

Tomaž Košir:

C1. — , M. Omladič, *Normalized tight vs. general frames in sampling problems*, Adv. Oper. Theory **2** (2017), 114–125.

E1. Član organizacijskega odbora konference 8th Linear Algebra Workshop, Ljubljana, junij 2017.

I1. Mentorstvo pri 9 magistrskih delih in enem delu diplomskega seminarja.

Gašper Košmrlj:

C1. B. Brešar, C. Bujtás, T. Gologranc, s. Klavžar, — , B. Patkós, Z. Tuza, M. Vizer, *Grundy dominating sequences and zero forcing sets*, Discrete Optim. **26** (2017), 66–77.

C2. B. Brešar, P. Dorbec, S. Klavžar, — , *How long can one bluff in the domination game?*, Discuss. Math. Graph Theory **37** (2017), 337–352.

- C3. *Domination game on paths and cycles*, Ars Math. Contemp. **13** (2017), 125–136.

Jernej Kozak:

- B1. G. Jaklič, —, *On parametric polynomial circle approximation*, sprejeto v objavo v Numer. Algorithms.

Marjeta Kramar Fijavž:

- A1. A. Bátkai, —, A. Rhandi, *Positive operator semigroups : from finite to infinite dimensions*, Birkhäuser, Basel, Švica, 2017.
- C1. —, A. Peperko, E. Sikolya, *Semigroups of max-plus linear operators*, Semigroup Forum **94** (2017), 463–476.
- C2. B. Andreianov, —, A. Peperko, E. Sikolya, *Erratum to: semigroups of max-plus linear operators*, Semigroup Forum **94** (2017), 477–479.
- C3. K. Engel, —, *Exact and positive controllability of boundary control systems*, Netw. Heterog. Media **12** (2017), 319–337.
- C4. N. Bezak, S. Rusjan, —, M. Mikoš, M. Šraj, *Estimation of suspended sediment loads using copula functions*, Water **9** (2017), 1–23.
- C5. D. Kozelj, M. Gorjup, —, *Uporaba metode spektralnega razbitja grafov za zasnovo merilnih območij v vodovodnem omrežju = An application of spectral graph partition for designing district metered areas in water supply networks*, Acta Hydrotech. **30** (2017), 81–96.
- E1. Članica organizacijskega odbora konference 8th *Linear Algebra Workshop*, Ljubljana, junij 2017.
- F1. *Second order differential operators on $L^p([0, 1], \mathbb{C})$* , vabljeno predavanje, Operator Semigroups in Analysis: Modern Developments, Będlewo, Poljska, april 2017.
- F2. *Linear parabolic equations on networks*, vabljeno predavanje, 20th Internet Seminar “Linear Parabolic Equations”, Baronissi, Italija, junij 2017.
- G1. *The semigroup approach to transport processes in networks*, 8th Workshop on the Mathematical Foundations of Traffic, Rim, Italija, marec 2107.
- G2. *Koopman semigroups*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.

- G3. *Waves and diffusion on metric graphs*, 5th Najman Conference on Spectral Theory and Differential Equations, Opatija, Hrvaška, september 2017.
- G4. *Semigroup approach to waves and diffusion on networks*, Final conference: “Discrete and Continuous Models in the Theory of Networks”, Bielefeld, Nemčija, november 2017.
- II. Somentorstvo pri eni doktorski disertaciji.

Tadeja Kraner Šumenjak:

- C1. K. Pažek, —, Č. Rozman, T. Knez, *Vključevanje lokalnih proizvodov v prehrano javnih zavodov - študija primera blagovne znamke Ekodar*, poglavje v *Razvojni potenciali z vidika prehrane*, str. 122–136, RIS Dvorec Rakičan, Murska Sobota, 2017.
- G1. *On k -rainbow independent domination in graphs*, 30th Ljubljana - Leoben Graph Theory Seminar, Maribor, september 2017.
- II. Recenzije v revijah Discrete Applied Mathematics, Discrete Mathematics & Theoretical Computer Science (DMTCS) ter Discussiones Mathematicae. Graph Theory.
- II. Somentorstvo pri enem magistrskem delu in pri eni doktorski disertaciji.

Ganna Kudryavtseva:

- C1. —, M. V. Lawson, *A perspective on non-commutative frame theory*, Adv. Math. **311** (2017), 378–468.
- C2. —, P. Škraba, *The principal bundles over an inverse semigroup*, Semigroup Forum **94** (2017), 674–695.
- C3. M. Dokuchaev, V. V. Kirichenko, —, M. Plakhotnyk, *The max-plus algebra of exponent matrices of tiled orders*, J. Algebra **490** (2017), 1–20.
- F1. *Etale categories, Ehresmann quantales and restriction semigroups*, vabljeno predavanje, Applications of Operator Algebras: Order, Disorder and Symmetry, Edinburg, Škotska, junij 2017.
- F2. *A perspective on non-commutative frame theory*, vabljeno predavanje, Facets of Irreversibility: Inverse Semigroups, Groupoids, and Operator Algebras, Oslo, Norveška, december 2017.
- II. 2 recenziji za MathSciNet.

Bojan Kuzma:

- B1. G. Dolinar, —, J. Marovt, *A note on commutativity preserving maps on $M_n(\mathbb{R})$* , sprejeto v objavo v *Oper. Matrices*.
- B2. *Dimensions of complex Hilbert spaces are determined by the commutativity relation*, sprejeto v objavo v *J. Operator Theory*.
- B3. G. Dolinar, —, N. Stopar, *Characterization of orthomaps on the Cayley plane*, sprejeto v objavo v *Aequationes Math.*
- C1. H. F. Da Cruz, G. Dolinar, R. Fernandes, —, *Maximal doubly stochastic matrix centralizers*, *Linear Algebra Appl.* **532** (2017), 387–396.
- C2. D. Dolžan, D. Kokol-Bukovšek, —, *On diameter of components in commuting graphs*, *Linear Algebra Appl.* **522** (2017), 161–174.
- C3. —, T. Petek, *Maps preserving unitarily invariant norms of Jordan product of matrices*, *J. Math. Anal. Appl.* **455** (2017), 1579–1596.
- C4. G. Dolinar, —, J. Marovt, *Lie product preserving maps on $M_n(\mathbb{F})$* , *Filomat* **31** (2017), 5335–5344.
- D1. Član uredniškega odbora revije *Linear and Multilinear Algebra*.
- D2. Član uredniškega odbora revije *Special Matrices*.
- E1. Član organizacijskega odbora konference 8th *Linear Algebra Workshop*, Ljubljana, junij 2017.
- G1. *Fundamental theorem on orthomaps over certain projective spaces*, *Pre-servers Everywhere*, Szeged, Madžarska, junij 2017.

Boštjan Kuzman:

- B1. —, A. Malnič, P. Potočnik, *On vertex- and edge-transitive graphs over doubled cycles*, sprejeto v objavo v *J. Combin. Theory Ser. B*.
- F1. *Vertex- and edge-transitive graphs over doubled cycles*, seminarsko predavanje, Beijing Jiatong University, Peking, Kitajska, oktober 2017.
- G1. *Some recent results on symmetric graphs*, 7th PhD Summer School in Discrete Mathematics, Rogla, Slovenija, julij 2017.
- G2. *On graphs of prime valency admitting a solvable arc-transitive group*, *Finite Geometry Workshop*, Szeged, Madžarska, april 2017.
- I1. Mentorstvo pri 6 diplomskih delih.

Uroš Kuzman:

- B1. F. Bertrand, — , *Local approximation of non-holomorphic discs in almost complex manifolds*, sprejeto v objavo v J. Math. Anal. Appl.
- F1. *On generalized analytic vectors*, seminar za kompleksno analizo, Det Kongelige Frederiks Universitet, Oslo, Norveška, marec 2017.
- F2. *Approximation of non-holomorphic discs in almost complex manifolds*, raziskovalni seminar, American University of Beirut, Bejrut, Libanon, september 2017.
- I1. Mafjski vikend - vodja programa.
- I2. Sodelovanje v oddaji *Ugriznimo znanost* (RTVSLO, 44 oddaj).
- I3. Mentorstvo pri 2 delih diplomskega seminarja.

Bojan Magajna:

- B1. *Maps with the unique extension property and C^* -extreme points*, sprejeto v objavo v Complex Anal. Oper. Theory.
- D1. Član uredniškega odbora revije *Operators and Matrices*.
- D1. Član uredniškega odbora revije *Operators and Matrices*.
- I1. 4 recenzije za MathSciNet.
- I2. Mentorstvo pri enem magistrskem delu.

Aleksander Malnič:

- B1. B. Kuzman, — , P. Potočnik, *On vertex- and edge-transitive graphs over doubled cycles*, sprejeto v objavo v J. Combin. Theory Ser. B.
- B2. — , R. Požar , *On Split Liftings with Sectional Complements*, sprejeto v objavo v Math. Comp.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- E1. Član znanstvenega odbora konference 7th *PhD Summer School in Discrete Mathematics*, Rogla, julij 2017.
- F1. *Vertex and edge transitive graphs over doubled cycles*, vabljen predavanje, Eötvös Loránd University, Budimpešta, Madžarska, julij 2017.
- F2. *On the simultaneous conjugacy problem*, vabljen predavanje, Graph Theory Weekend in Modra, Slovaška, september 2017.

- G1. *Vertex and edge transitive graphs over doubled cycles*, 2nd Malta Conference in Graph Theory and Combinatorics 2017 (MCGTC-2017), Qawra, Malta, junij 2017.
- G2. *4-valent vertex and edge transitive graphs over doubled cycles*, 7th Workshop Graph Embeddings and Maps on Surfaces, Podbanské, Slovaška, julij/avgust 2017.

Tilen Marc:

- B1. L. Šubelj, — , *Convexity in complex networks*, sprejeto v objavo v Network Science.
- C1. L. Šubelj, — , *On convexity in complex networks*, CompleNet'17, Dubrovnik, Hrvaška, marec 2017, Programme with Abstracts, 14–16.
- C2. *Mirror graphs: graph theoretical characterization of reflection arrangements and finite Coxeter groups*, European J. Combin. **63** (2017), 115-123.
- C3. *Classification of Vertex Transitive Cubic Partial Cubes*, J. Graph Theory **86** (2017), 406-421.

Janko Marovt:

- B1. *Orders in rings based on the core-nilpotent decomposition*, sprejeto v objavo v Linear Multilinear Algebra.
- B2. *On partial orders in proper *-rings*, sprejeto v objavo v Rev. Un. Mat. Argentina .
- B3. G. Dolinar, B. Kuzma, — , *A note on commutativity preserving maps on $M_n(\mathbb{R})$* , sprejeto v objavo v Oper. Matrices.
- C1. — , K. Mihelič, *On sets of elements in Rickart rings induced by partial orders*, Appl. Math. Comput. **315** (2017), 555–563.
- C2. G. Dolinar, B. Kuzma, — , *Lie product preserving maps on $M_n(\mathbb{F})$* , Filomat **31** (2017), 5335–5344.
- G1. *Partial orders in Rickart rings*, Preservers Everywhere, Szeged, Madžarska, junij 2017.
- I1. Mentor pri enem magistrskem delu in pri enem diplomskem projektu.
- I2. Pisec recenzij v revijah Naše gospodarstvo, Advances in Linear Algebra & Matrix Theory, Linear Algebra and its Applications, Linear and Multilinear Algebra.

- I3. 7 recenzij za Zentralblatt MATH.
- I4. 8 recenzij za MathSciNet.

Dragan Marušič:

- C1. M. Balestri, C. Crisafulli, L. Donato, I. Giegling, R. Calati, N. Antypa, B. L. Schneider, — , M. E. Tarozzi, D. Marušič, M. Paragi, A. M. Hartmann, B. Konte, A. Marsano, A. Serretti, D. Rujescu, *Nine differentially expressed genes from a post mortem study and their association with suicidal status in a sample of suicide completers, attempters and controls*, J. Psychiatr. Res. **91** (2017), 98–104.
- C2. *Semiregular automorphisms in vertex-transitive graphs with a solvable group of automorphisms*, Ars Math. Contemp. **13** (2017), 461–468.
- D1. Glavni in odgovorni urednik revije *Ars Mathematica Contemporanea*.
- D2. Ustanovni in glavni urednik revije *The Art of Discrete and Applied Mathematics*.
- D3. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>
- F1. *Symmetric graphs: why semiregularity matters*, vabljeno predavanje, Hypergraphs, Graphs and Designs, Sant'Alessio Siculo, Italija, junij 2017.
- F2. *Semiregular elements in 2-closures of solvable groups*, vabljeno predavanje, Eötvös Loránd University, Budimpešta, Madžarska, julij 2017.
- F3. *Obvious and hidden symmetries of mathematical objects*, vabljeno predavanje, Symmetry 2017- The First International Conference on Symmetry, Barcelona, Španija, oktober 2017.

Matej Mencinger:

- C1. T. Letnik, — , S. Božičnik, *Innovative solution for energy efficient urban freight deliveries*, 10th International Conference on Sustainable Energy and environmental Protection, Bled, junij 2017, Energy efficiency : conference proceedings, 399–408.
- C2. *On the centre-focus problem in some Liénard systems = O problemu centra in fokusa v nekaterih Liénardovih sistemih*, J. Energy Techn. **10** (2017), 57–69.
- C3. — , B. Ferčec, *The center and cyclicity problems for some analytic maps*, Appl. Math. Comput. **306** (2017), 73–85.

- F1. *On local dynamics of some quadratic systems*, vabljeno predavanje, Fakultet elektrotehnike i računarstva (FER), Sveučilište u Zagrebu, Hrvatska, april 2017.
- F2. *Ordinary differential equations*, vabljeno predavanje, University of Łódź, Poljska, september 2017.
- G1. *Innovative solution for energy efficient urban freight deliveries*, 10th International Conference on Sustainable Energy and environmental Protection, Bled, junij 2017.
- I1. Mentorstvo pri enem magistrskem delu.
- I2. Pisec recenzij v reviji American Journal of Computational and Applied Mathematics.

Štefko Miklavič:

- B1. M. Maclean, —, S. Penjić, *An A-invariant subspace for bipartite distance-regular graphs with exactly two irreducible T-modules with endpoint 2, both thin*, sprejeto v objavo v J. Algebraic Combin.
- B2. B. Frelih, —, *On 2-distance-balanced graphs*, sprejeto v objavo v Ars Math. Contemp.
- C1. N. Chiarelli, C. Dibek, T. z, Ekim, D. Gozüpek, —, *On matching extendability of lexicographic products*, RAIRO Oper. Res. **51** (2017), 857–873.
- C2. M. Maclean, —, *On bipartite distance-regular graphs with exactly one non-thin T-module with endpoint two*, European J. Combin. **64** (2017), 125–137.
- C3. M. Maclean, —, *On bipartite distance-regular graphs with exactly two irreducible T-modules with endpoint two*, Linear Algebra Appl. **515** (2017), 275–297.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- E1. Član znanstvenega odbora konference 7th *PhD Summer School in Discrete Mathematics*, Rogla, julij 2017.
- F1. *Cayley Graphs*, naučni kolokvij, Univerzitet u Zenici, Bosna in Hercegovina, november 2017.

Uroš Milutinović:

- B1. I. Banič, M. Črepnjak, M. Merhar, — , T. Sovič, *The closed subset theorem for inverse limits with upper semicontinuous bonding functions*, sprejeto v objavo v Bull. Malays. Math. Sci. Soc.
- C1. I. Banič, M. Črepnjak, M. Merhar, — , T. Sovič, *An Anderson-Choquet-type theorem and a characterization of weakly chainable continua*, Mediter. J. Math. **14** (2017), 1–14.
- I1. Mentorstvo pri enem magistrskem delu.

Bojan Mohar:

- B1. R. Churchley, — , *A submodular measure and approximate Gomory-Hu theorem for packing odd trails*, sprejeto v objavo v zborniku SODA 2018, New Orleans, ZDA, januar 2018.
- B2. D. Gajser, — , *Minimal normal graph covers*, sprejeto v objavo v Combinatorica.
- B3. F. Havet, A. K. Maia, — , *Finding a subdivision of a prescribed digraph of order 4*, sprejeto v objavo v J. Graph Theory.
- B4. C. A. Alfaro, A. Arroyo, M. Derňár, — , *The crossing number of the cone of a graph*, sprejeto v objavo v SIAM J. Discrete Math.
- B5. S. A. Hosseini, — , *Game of cops and robbers in oriented quotients of the integer grid*, sprejeto v objavo v Discrete Math.
- B6. M. Kotrbčič, N. Matsumoto, — , A. Nakamoto, K. Noguchi, K. Ozeki, A. Vodopivec, *Grünbaum colorings of even triangulations on surfaces*, sprejeto v objavo v J. Graph Theory.
- B7. — , *The structure of ABC-minimal trees with given number of leaves*, sprejeto v objavo v MATCH Commun. Math. Comput. Chem.
- C1. Z. Dvořák, D. Král', — , *Graphic TSP in cubic graphs*, 34th Symposium on Theoretical Aspects of Computer Science, Hannover, Nemčija, marec 2017, STACS 2017 (Leibniz international proceedings in informatics, 66), 13 str..
- C2. Z. Dvořák, — , R. Šámal, *Exponentially many nowhere-zero Z_3 -, Z_4 -, and Z_6 -flows*, The European Conference on Combinatorics, Graph Theory and Applications, Dunaj, Avstrija, september 2017, EuroComb'17 (Electronic Notes in Discrete Mathematics, 61), 375–381.
- C3. D. S. Archdeacon, C. Bonnington, — , *Embedding quartic Eulerian digraphs on the plane*, Australas. J. Combin. **67** (2017), 364–377.

- C4. D. S. Archdeacon, M. Devos, Stef. Hannie, — , *Whitney's theorem for 2-regular planar digraphs*, Australas. J. Combin. **67** (2017), 159–165.
- C5. Z. Dvořák, B. Lidický, — , *5-choosability of graphs with crossings far apart*, J. Combin. Theory Ser. B **123** (2017), 54–96.
- C6. Z. Dvořák, B. Lidický, — , L. Postle, *5-list-coloring planar graphs with distant precolored vertices*, J. Combin. Theory Ser. B **122** (2017), 311–352.
- C7. K. Guo, — , *Digraphs with Hermitian spectral radius below 2 and their cospectrality with paths*, Discrete Math. **340** (2017), 2616–2632.
- C8. K. Guo, — , *Hermitian adjacency matrix of digraphs and mixed graphs*, J. Graph Theory **85** (2017), 217–248.
- C9. A. Harutyunyan, — , *Planar digraphs of digirth five are 2-colorable*, J. Graph Theory **84** (2017), 408–427.
- C10. F. Knox, N. Matsumoto, S. G. Hermosillo de la Maza, — , C. Linhares Sales, *Proper orientations of planar bipartite graphs*, Graphs Combin. **33** (2017), 1189–1194.
- C11. Z. Li, — , *Planar digraphs of digirth four are 2-colorable*, SIAM J. Discrete Math. **31** (2017), 2201–2205.
- C12. — , B. Reed, D. R. Wood, *Colourings with bounded monochromatic components in graphs of given circumference*, Australas. J. Combin. **69** (2017), 236–242.
- C13. — , P. Škoda, *Obstructions for two-vertex alternating embeddings of graphs in surfaces*, European J. Combin. **59** (2017), 96–113.
- C14. S. . C. Rezaei, S. A. Hosseini, — , *Almost all regular graphs are normal*, Discrete Appl. Math. **230** (2017), 51–55.
- D1. Glavni urednik revije *Electronic Journal of Combinatorics*.
- D2. Glavni urednik revije *Journal of Combinatorial Theory. Series B*.
- D3. Član uredniškega odbora revije *Journal of Graph Theory*.
- D4. Član uredniškega odbora revije *MATCH. Communications in Mathematical and in Computer Chemistry*.
- D5. Področni urednik revije *Discrete Mathematics*.
- D6. Član uredniškega odbora revije *Discrete and Computational Geometry*.
- D7. Član uredniškega odbora revije *Tbilisi Mathematical Journal*.
- E1. Član programskega odbora konference *Conference on Algorithms and Discrete Applied Mathematics (CALDAM 2017)*, Goa, Indija, februar 2017.
- E2. Član organizacijskega odbora konference *Geometric and Structural Graph Theory*, Banff, Kanada, avgust 2017.

- F1. *Odd trails and totally odd immersions in graphs*, vabljeno predavanje, Workshop on Structural Graph Theory and Discrete Optimization, Sanya, Kitajska, maj 2017.
- F2. *Odd trails in graphs and totally odd immersions*, kolokvijsko predavanje, Warwick University, Warwick, Velika Britanija, maj 2017.
- F3. *Totally odd immersions of graphs*, vabljeno predavanje, CanaDAM 2017, Toronto, Kanada, junij 2017.
- F4. *Maximizing the number of colorings*, vabljeno plenarno predavanje, 17th Workshop on Graph Theory: Colourings, Independence and Domination, Zielona Góra, Poljska, september 2017.
- F5. *Ramanujan gap for the norm of adjacency operators*, vabljeno predavanje, Discrete and Continuous Models in the Theory of Networks, Bielefeld, Nemčija, november 2017.

Blaž Mojškerc:

- C1. D. Kokol-Bukovšek, — , *Jordan triple product homomorphisms on Hermitian matrices of dimension two*, Publ. Math. Debrecen **90** (2017), 227–250.
 - G1. *Jordan triple product homomorphisms on triangular matrices to and from dimension one*, MAT TRIAD 2017 - International Conference on MATRIX Analysis and its Applications., Będlewo, Poljska, september 2017.
 - G2. *Jordan triple product homomorphisms on triangular matrices to and from dimension one*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- II. Soavtorstvo pri enem univerzitetnem učnem gradivu.

Giovanni Molica Bisci:

- C1. V. Ambrosio, — , *Periodic solutions for nonlocal fractional equations*, Commun. Pure Appl. Anal. **16** (2017), 331–344.
- C2. S. Baraket, — , *Multiplicity results for elliptic Kirchhoff-type problems*, Adv. Nonlinear Anal. **6** (2017), 85–93.
- C3. R. Bartolo, — , *Asymptotically linear fractional p -Laplacian equations*, Ann. Mat. Pura Appl. (4) **196** (2017), 427–442.
- C4. L. D’Onofrio, A. Fiscella, — , *Perturbation methods for nonlocal Kirchhoff-type problems*, Fract. Calc. Appl. Anal. **20** (2017), 829–853.

- C5. M. Ferrara, — , *Some applications of a local minimum result*, *Minimax Theory Appl.* **2** (2017), 41–50.
- C6. M. Ferrara, — , D. Repovš, *Nonlinear elliptic equations on Carnot groups*, *RACSAM. RevR. Acad. CiencExactas Fís. Nat. Ser. A Mat.* **111** (2017), 707–718.
- C7. J. Mawhin, — , *A Brezis-Nirenberg type result for a nonlocal fractional operator*, *J. Lond. Math. Soc. (2)* **95** (2017), 73–93.
- C8. — , V. Rădulescu, *A sharp eigenvalue theorem for fractional elliptic equations*, *Israel J. Math.* **219** (2017), 331–351.
- C9. — , D. Repovš, *Yamabe-type equations on Carnot groups*, *Potential Anal.* **46** (2017), 369–383.
- C10. — , D. Repovš, L. Vilasi, *Multiple solutions of nonlinear equations involving the square root of the Laplacian*, *Appl. Anal.* **96** (2017), 1483–1496.
- C11. — , L. Vilasi, *On a fractional degenerate Kirchhoff-type problem*, *Commun. Contemp. Math.* **19** (2017), art. 1550088, 23 str.
- C12. B. Zhang, — , M. Xiang, *Multiplicity results for nonlocal fractional p -Kirchhoff equations via Morse theory*, *Topol. Methods Nonlinear Anal.* **49** (2017), 445–461.
- D1. Član uredniškega odbora revije *Advances in Nonlinear Analysis*.
- D2. Član uredniškega odbora revije *Boundary Value Problems*.
- D3. Član uredniškega odbora revije *Complex Variables and Elliptic Equations*.
- D4. Član uredniškega odbora revije *Electronic Journal of Differential Equations*.
- D5. Član uredniškega odbora revije *Opuscula Mathematica*.
- F1. *Fractional problems with critical growth*, vabljeno predavanje, Politecnico di Bari, Italija, februar 2017.
- F2. *Supercritical periodic problems*, vabljeno predavanje, Two-day meeting on PDEs, Perugia, Italija, februar 2017.
- F3. *Variational and topological methods for nonlocal fractional problems*, vabljeno predavanje, Università di Roma Tor Vergata, Rim, Italija, maj 2017.
- F4. *Fractional equations with periodic boundary conditions*, vabljeno predavanje, International Conference on Elliptic and Parabolic Problems, Zürich, Švica, maj 2017.
- F5. *(Super) critical nonlocal periodic equations*, vabljeno predavanje, Università di Perugia, Italija, avgust 2017.

- G1. *Variational methods for nonlocal fractional problems*, Fractional Calculus and its Applications, Rim, Italija, januar 2017.
- G2. *Variational and topological methods for nonlocal fractional problems*, Workshop “Research Days in Commutative Algebra and Combinatorics”, Messina, Italija, maj 2017.

Primož Moravec:

- B1. C. Delizia, U. Jezernik, — , C. Nicotera , *Groups in which every non-abelian subgroup is self-normalizing*, sprejeto v objavo v Monatsh. Math.
- B2. C. Delizia, U. Jezernik, — , C. Nicotera, *Groups in which every non-nilpotent subgroup is self-normalizing*, sprejeto v objavo v Ars Math. Contemp.
- B3. U. Jezernik, — , *Commutativity preserving extensions of groups*, sprejeto v objavo v Proc. Roy. Soc. Edinburgh Sect. A.
- C1. C. Delizia, U. Jezernik, — , C. Nicotera, C. Parker, *Locally finite groups in which every non-cyclic subgroup is self-centralizing*, J. Pure Appl. Algebra **221** (2017), 401–410.
- D1. Urednik revije *Ars Mathematica Contemporanea*.
- F1. *Obstructions to Noether’s problem*, predavanje na matematičnem koloquiju, University of Auckland, Nova Zelandija, december 2017.
- H1. *Dirichletov princip in paradoks rojstnega dneva*, Presek **45** (2017/2018), št. 1, 4–6.
- I1. Avtorstvo 2 univerzitetnih učnih gradiv.

Nežka Mramor-Kosta:

- B1. H. Isal, M. Pamuk, — , *Perfect discrete Morse functions on connected sums*, sprejeto v objavo v Homology Homotopy Appl.
- C1. D. Šoberl, — , P. Škraba, *Decentralized computation of homology in wireless sensor networks using spanning trees*, International Cross-Domain Conference, Reggio, Italija, avgust/september 2017, Machine learning and knowledge extraction (Lecture notes in computer science, 10410), 25–40.

- C2. H. C. King, K. Knudson, — , *Birth and death in discrete Morse theory*, J. Symbolic Comput. **78** (2017), 41–60.
- C3. W. Ripple, — , ... et al., *World scientists' warning to humanity : a second notice*, Bioscience **67** (2017), 1026–1028.
- G1. *Decentralized computation of homology in wireless sensor networks using spanning trees*, International Cross-Domain Conference, Reggio, Italija, avgust/september 2017.

Janez Mrčun:

- F1. *Monodromy groups of Lie groupoids*, vabljeno predavanje, Higher Geometric Structures along the Lower Rhine X, Utrecht, Nizozemska, oktober 2017.

Polona Oblak:

- C1. D. Dolžan, — , *The total graphs of finite commutative semirings*, Results Math. **72** (2017), 193–204.
- C2. — , H. Šmigoc, *The maximum of the minimal multiplicity of eigenvalues of symmetric matrices whose pattern is constrained by a graph*, Linear Algebra Appl. **512** (2017), 48–70.
- F1. *The maximum of the minimal multiplicity of eigenvalues of symmetric matrices whose pattern is constrained by a graph*, vabljeno predavanje, University College Dublin, Irska, april 2017.
- F2. *Semirings and their applications*, vabljeno predavanje, University College Dublin, Irska, maj 2017.
- F3. *The maximum of the minimal multiplicity of eigenvalues of symmetric matrices whose pattern is constrained by a graph*, vabljeno predavanje, Meeting of the International Linear Algebra Society, Iowa State University, ZDA, julij 2017.

Matjaž Omladič:

- C1. F. Durante, — , L. Oražem, N. Ružič Gorenjec, *Shock models with dependence and asymmetric linkages*, Fuzzy Sets and Systems **323** (2017), 152–168.
- C2. Š. Jezernik Širca, — , *The JLS model with ARMA/GARCH errors*, Ars Math. Contemp. **13** (2017), 37–50.

- C3. D. Kokol-Bukovšek, — , *Linear spaces of symmetric nilpotent matrices*, Linear Algebra Appl. **530** (2017), 384–404.
- C4. T. Košir, — , *Normalized tight vs. general frames in sampling problems*, Adv. Oper. Theory **2** (2017), 114–125.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D2. Član uredniškega odbora revije *Operators and Matrices*.
- G1. *Linear spaces of symmetric nilpotent matrices*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G2. *Linear spaces of symmetric nilpotent matrices*, MAT TRIAD 2017 - International Conference on MATRIX Analysis and its Applications., Będlewo, Poljska, september 2017.
- II. Mentorstvo pri eni doktorski disertaciji, 4 magistrskih delih in enem delu diplomskega seminarja.

Marko Orel:

- C1. *Preserver problems over finite fields*, poglavje v *Finite fields : theory, fundamental properties and applications (Mathematical research developments)*, str. 1–54, Nova Science Publishers, New York, ZDA, 2017.
- C2. *On Minkowski space and finite geometry*, J. Combin. Theory Ser. A **148** (2017), 145–182.
- F1. *Finite Minkowski space and the existence of ovoids in orthogonal polar space*, vabljeno predavanje, Odjel za matematiku Sveučilišta u Rijeci, Reka, Hrvaška, januar 2017.
- F2. *Maps that preserve pairs of light-like events on a finite analog of the Minkowski space*, vabljeno predavanje, Lomonosov Moscow State University, Moskva, Rusija, marec 2017.
- F3. *From graph homomorphisms and preserver problems to existence of ovoids in orthogonal polar space*, vabljeno predavanje, Prirodoslovno matematički fakultet, Sveučilište u Zagrebu, Hrvaška, marec 2017.
- G1. *On matrix theory, graph theory, and finite geometry*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G2. *Preservers on finite structures*, Preservers Everywhere, Szeged, Madžarska, junij 2017.
- G3. *Connections between preserver problems, graph theory, and finite geometry*, Meeting of the International Linear Algebra Society, Iowa State University, ZDA, julij 2017.

Nikolaos Papageorgiou:

- C1. S. Aizicovici, —, V. Staicu, *Nonlinear Dirichlet problems with double resonance*, Commun. Pure Appl. Anal. **16** (2017), 1147–1168.
- C2. L. Gasiński, —, *Asymmetric $(p, 2)$ -equations with double resonance*, Calc. Var. Partial Differential Equations **56** (2017), art. 88, 23 str.
- C3. S. Hu, —, *Elliptic equations with indefinite and unbounded potential and a nonlinear concave boundary condition*, Commun. Contemp. Math. **19** (2017), art. 1550090, 34 str.
- C4. D. Averna, —, E. Tornatore, *Positive solutions for nonlinear Robin problems*, Electron. J. Differential Equations **2017** (2017), art. 204, 25 str.
- C5. G. Bonanno, P. Candito, R. Livrea, —, *Existence, nonexistence and uniqueness of positive solutions for nonlinear eigenvalue problems*, Commun. Pure Appl. Anal. **16** (2017), 1169–1188.
- C6. S. El Manouni, —, P. Winkert, *Parametric nonlinear nonhomogeneous Neumann equations involving a nonhomogeneous differential operator*, Monatsh. Math. **177** (2017), 203–233.
- C7. G. Fragnelli, D. Mugnai, —, *Superlinear Neumann problems with the p -Laplacian plus an indefinite potential*, Ann. Mat. Pura Appl. (4) **196** (2017), 479–517.
- C8. L. Gasiński, L. Klimczak, —, *Nonlinear Dirichlet problems with no growth restriction on the reaction*, Z. Anal. Anwend. **36** (2017), 209–238.
- C9. L. Gasiński, —, *Multiplicity theorems for $(p, 2)$ -equations*, J. Nonlinear Convex Anal. **18** (2017), 1297–1323.
- C10. L. Gasiński, —, *Positive solutions for nonlinear elliptic problems with dependence on the gradient*, J. Differential Equations **263** (2017), 1451–1476.
- C11. L. Gasiński, —, *Positive solutions for the Neumann p -Laplacian with superdiffusive reaction*, Bull. Malays. Math. Sci. Soc. **40** (2017), 1711–1731.
- C12. L. Gasiński, —, *Positive, extremal and nodal solutions for nonlinear parametric problems*, J. Convex Anal. **24** (2017), 261–285.
- C13. —, F. Papalini, *Existence, nonexistence and multiplicity of positive solutions for nonlinear, nonhomogeneous Neumann problems*, Manuscripta Math. **154** (2017), 257–274.
- C14. —, F. Papalini, *On p -logistic equations of equidiffusive type*, Positivity **21** (2017), 9–21.
- C15. —, G. Smyrlis, *Resonant Robin problems with indefinite and unbounded*

- potential*, Topol. Methods Nonlinear Anal. **49** (vol.), 51–74.
- C16. — , G. Smyrliis, *Strongly resonant Robin problems with indefinite and unbounded potential*, Topol. Methods Nonlinear Anal. **49** (2017), 511–527.
- C17. — , C. Vetro, F. Vetro, *Multiple nodal solutions for semilinear Robin problems with indefinite linear part and concave terms*, Topol. Methods Nonlinear Anal. **50** (2017), 269–286.
- C18. — , C. Vetro, F. Vetro, *Robin problems with general potential and double resonance*, Appl. Math. Lett. **68** (2017), 122–128.
- C19. — , P. Winkert, *Asymmetric $(p, 2)$ -equations, superlinear at $+\infty$ resonant at $-\infty$* , Bull. Sci. Math. **141** (2017), 443–488.
- D1. Član uredniškega odbora revije *Discrete and Continuous Dynamical Systems*.
- D2. Član uredniškega odbora revije *International Journal of Dynamical Systems and Differential Equations*.
- D3. Član uredniškega odbora revije *Journal of Applied Mathematics and Stochastic Analysis*.
- D4. Član uredniškega odbora revije *Journal of Inequalities and Applications*.
- D5. Član uredniškega odbora revije *Minimax Theory and its Applications*.

Petar Pavešić:

- B1. G. Conner, W. Herfort, — , *Some anomalous examples of lifting spaces*, sprejeto v objavo v *Topology Appl.*
- B2. *A Topologist's View of Kinematic Maps and Manipulation Complexity*, sprejeto v objavo v *Contemp. Math.*
- C1. *Complexity of the forward kinematic map*, *Mech. Mach. Theory* **117** (2017), 230–243.
- F1. *Topological complexity of a fibration*, vabljeno predavanje, Wydział Matematyki i Informatyki, Uniwersytet im. Adama Mickiewicza w Poznaniu, Poznanj, Poljska, februar 2017.
- F2. *A generalization of covering spaces*, vabljeno predavanje, Wydział Matematyki i Informatyki, Uniwersytet im. Adama Mickiewicza w Poznaniu, Poznanj, Poljska, marec 2017.
- F3. *Topological complexity of fibrations and covering maps*, vabljeno predavanje, *Applied Topology*, Będlewo, Poljska, junij/julij 2017.

- G1. *Free topological groups and functorial fibrewise constructions*, Geometric Topology and Geometry of Banach Spaces, Eilat, Izrael, maj 2017.
- G2. *Geometry of compact lifting spaces*, 19th ÖMG Congress and Annual DMV Meeting, Salzburg, Avstrija, september 2017.

Aljoša Peperko:

- B1. Z. Shao, Z. Li, —, J. Wan, J. Žerovnik, *Independent rainbow domination of graphs*, sprejeto v objavo v Bull. Malays. Math. Sci. Soc.
- C1. M. Kramar Fijavž, —, E. Sikolya, *Semigroups of max-plus linear operators*, Semigroup Forum **94** (2017), 463–476.
- C2. B. Andreianov, M. Kramar Fijavž, —, E. Sikolya, *Erratum to: semigroups of max-plus linear operators*, Semigroup Forum **94** (2017), 477–479.
- C3. V. Müller, —, *On The Bonsall cone spectral radius and the approximate point spectrum*, Discrete Contin. Dyn. Syst. **37** (2017), 5337–5354.
- C4. *Bounds on the joint and generalized spectral radius of the Hadamard geometric mean of bounded sets of positive kernel operators*, Linear Algebra Appl. **533** (2017), 418–427.
- F1. *Inequalities for the joint and generalized spectral radius of bounded sets of positive kernel operators*, vabljeno predavanje, Institute of Mathematics of the Czech Academy of Sciences, Praga, Češka, oktober 2017.
- G1. *Inequalities on the spectral radius, operator norm and numerical radius of Hadamard weighted geometric mean of positive kernel operators*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- I1. Soavtor 2 visokošolskih učbenikov.
- I2. 4 recenzije za MathSciNet.
- I3. Mentorstvo pri enem diplomskem delu na 1. bolonjski stopnji.

Tatjana Petek:

- C1. M. Karder, —, *Maps on states preserving generalized entropy of convex combinations*, Linear Algebra Appl. **523** (2017), 86–98.
- C2. B. Kuzma, —, *Maps preserving unitarily invariant norms of Jordan product of matrices*, J. Math. Anal. Appl. **455** (2017), 1579–1596.
- C3. —, G. Radić, *Linear preservers of equivalence relations on infinite-dimensional spaces*, Studia Math. **238** (2017), 101–119.

Iztok Peterin:

- B1. T. Gologranc, M. Jakovac, — , *The security number of lexicographic products*, sprejeto v objavo v Quaest. Math.
- B2. — , P. Žigert Pleteršek, *Wiener index of the strong product of graphs*, sprejeto v objavo v Oposcula Math.
- B3. M. Jakovac, — , *The b -chromatic number – a survey*, sprejeto v objavo v Discrete Appl. Math.
- B4. W. Imrich, — , *Cartesian products of directed graphs with loops*, sprejeto v objavo v Discrete Math.

- C1. S. Klavžar, — , I. G. Yero, *Graphs that are simultaneously efficient open domination and efficient closed domination graphs*, Discrete Appl. Math. **217** (2017), 613–621.
- C2. D. Kuziak, — , I. G. Yero, *Resolvability and strong resolvability in the direct product of graphs*, Results Math. **71** (2017), 509–526.

- E1. Član programskega in organizacijskega odbora konference *30th Ljubljana - Leoben Graph Theory Seminar*, Maribor, september 2017.

- F1. *From efficient closed domination over independence number to the Vizing Conjecture*, vabljen predavanje, 17th Workshop on Graph Theory: Colourings, Independence and Domination, Piechowice, Poljska, september 2017.
- F2. *Recognizing generalized Sierpiński graphs*, vabljen predavanje, Workshop on efficient algorithms, automata and data structures, The annual workshop of the project APVV-15-0091, Košice, Slovaška, november 2017.

- G1. *Cartesian products of directed graphs with loops*, 20th Workshop on hereditary graph properties, Piechowice, Poljska, september 2017.
- G2. *On the b -chromatic number of proper interval graphs*, 30th Ljubljana - Leoben Graph Theory Seminar, Maribor, september 2017.
- G3. *Recognizing (generalized) Sierpiński graphs*, 30th Ljubljana - Leoben Graph Theory Seminar, Maribor, september 2017.
- G4. *On the b -chromatic number of proper interval graphs*, 17th Workshop on Graph Theory: Colourings, Independence and Domination, Piechowice, Poljska, september 2017.

- I1. Urednik *Book of Abstracts*, konference *30th Ljubljana - Leoben Graph Theory Seminar*, FNM, Maribor, 2017.

Ciril Petr:

- G1. *Orkestracija mikroservisov z uporabo Kubernetes*, 22. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2017.
- H1. A. Krajnc, U. Zaletel, B. Štok, — , *Orkestracija mikroservisov z uporabo Kubernetes*, 22. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2017, OTS 2017 : zbornik dvaindvajsete konference, 1–11.

Lucijan Plevnik:

- B1. — , P. Šemrl, *Automorphisms of effect algebras*, sprejeto v objavo v Oper. Theory Adv. Appl.
- C1. — , G. Žerovnik, *Random sampling and validation of covariance matrices of resonance parameters*, International conference on nuclear data for science and technology, Brugge, Nizozemska, september 2016, ND2016 (EPJ Web of Conferences, 146), 4 str.
- C2. L. Snoj, D. Toškan, J. Malec, J. Beričič, A. Jazbec, Sebastj. Rupnik, — , B. Kos, G. Žerovnik, *Advances in teaching and training reactor physics*, ANS 2017 Winter Meeting, Washington, ZDA, oktobe/november 2017, Conference Proceedings (Transactions of American Nuclear Society, 117), 177–182.

Janez Povh:

- C1. L. Mihelač, — , *Predicting the acceptability of music with entropy of harmony*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 371–375.
- C2. M. Simionica, — , *A parallel implementation of the boundary point method*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 114–119.
- C3. A. Kastrin, J. Klisara, B. Lužar, — , *Analysis of Slovenian research community through bibliographic networks*, *Scientometrics* **110** (2017), 791–813.
- D1. Gostujoči urednik revije *Central European Journal of Operations Research*.

- E1. Član organizacijskega in programskega odbora konference *14th International Symposium on Operations Research in Slovenia*, Bled, september 2017.
- E2. Član organizacijskega odbora in vodja programskega odbora konference *European Study Group with Industry in Slovenia (ESGI)*, Bled, september 2017.
- F1. *High performance computers – a powerful tool for combinatorial optimization*, vabljeno predavanje, 5th Alpen-Adria-Workshop on Optimization, Celovec, Avstrija, december 2017.
- G1. *Center razvoja, raziskav in inovacij JV Slovenije*, Dan avtomatike in robotike, Novo mesto, april 2017.
- G2. *Kolaborativni roboti trkajo na vrata podjetij*, Dan avtomatike in robotike, Novo mesto, april 2017.
- G3. *Predicting the acceptability of music with entropy of harmony*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- G4. *A parallel implementation of the boundary point method*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- H1. F. Bratkovič, A. Dobrovoljc, — , *Center razvoja, raziskav in inovacij JV Slovenije*, Dan avtomatike in robotike, Novo mesto, april 2017, 25 let industrijske robotike v jugovzhodni Sloveniji in Posavju, 108–112.
- H2. A. Dobrovoljc, K. Mihalič, F. Bratkovič, — , *Kolaborativni roboti trkajo na vrata podjetij*, Dan avtomatike in robotike, Novo mesto, april 2017, 25 let industrijske robotike v jugovzhodni Sloveniji in Posavju, 113–117.
- II. Mentorstvo pri eni doktorski disertaciji in pri 2 magistrskih nalogah.

Jasna Prezelj Perman:

- C1. $\bar{\partial}$ -equation on (p, q) -forms on conic neighbourhoods of 1-convex manifolds, Proc. Amer. Math. Soc. **145** (2017), 4411–4421.
- F1. *On 1-convex spaces*, vabljeno predavanje, 1st Central European Complex Analysis Meeting, Dunaj, Avstrija, oktober 2018.
- G1. *Modelling the spread of bluetongue in Slovenia*, Modelling in animal health - ModAH conference, Nantes, Francija, junij 2017.
- II. Soavtorica enega univerzitetnega učbenika.

I2. Mentorstvo pri eni magistrski nalogi in 3 delih diplomskega seminarja.

Nataša Pržulj:

- C1. N. Malod-Dognin, — , *Omics data complementarity underlines functional cross-communication in yeast*, J. Integr. Bioinform. **14** (2017), 9 str.
- C2. N. Malod-Dognin, K. Ban, — , *Unified alignment of protein-protein interaction networks*, Sci. Rep. **7** (2017), 11 str.
- C3. K. Sokolina, S. Kittanakom, J. Snider, M. Kotlyar, P. Maurice, J. Ganda, A. Benleulmi-Chaachoua, K. Tadagaki, V. Wong, R. H. Malty, V. Deineko, H. Aoki, S. Amin, L. Riley, Z. Yao, X. Morato, S. Rahmati, H. Kobayashi, J. Menendez, D. Auerbach, S. Angers, — , M. Bouvier, M. Babu, F. Ciruela, R. Jockers, I. Jurisica, I. Stagljjar, *Systematic protein-protein interaction mapping for clinically relevant human GPCRs*, Mol. Syst. Biol. **13** (2017), 19 str.
- C4. O. Yaveroglu, N. Malod-Dognin, T. Milenkovic, — , *Rebuttal to the Letter to the Editor in response to the paper: Proper evaluation of alignment-free network comparison methods*, Bioinformatics **33** (2017), 1107-1109.

- F1. *Predictive integration of networked big data: from biology to economics*, seminarsko predavanje, Simon Fraser University, Vancouver, Kanada, februar 2017.
- F2. *Data-driven medicine*, seminarsko predavanje, University of Essex, Colchester, Velika Britanija, marec 2017.
- F3. *Predictive integration of networked big data*, vabljeno predavanje, Workshop on Statistical and Computational Challenges in Large Scale Molecular Biology, Banff (BIRS), Kanada, marec 2017.
- F4. *Data-driven medicine*, nastopno predavanje, University College London, Velika Britanija, april 2017.
- F5. *Mining biological networks*, vabljeno predavanje, European Human Genetics Conference (ESHG) 2017; Network Medicine, Kobenhaven, Danska, maj 2017.
- F6. *Data-driven medicine*, vabljeno predavanje, 13th International Symposium on Integrative Bioinformatics, Odense, Danska, junij 2017.
- F7. *Data-driven medicine*, vabljeno predavanje, Matematički institut SANU, Beograd, Srbija, junij 2017.
- F8. *Data-driven medicine*, Biomedical Engineering, University of Calgary, Kanada, julij 2017.

- F9. *Data-driven biomedical science*, vabljeno predavanje, 2nd Interdisciplinary Signalling Workshop, Visegrád, Madžarska, julij 2017.
- F10. *Data-driven medicine*, Vabljeno predavanje, Eidgenössische Technische Hochschule Zürich, Švica, avgust 2017.
- F11. *Data-driven medicine*, vabljeno predavanje, MCM/WS Conference on Systems Medicine, Valletta, Malta, september 2017.

Vicentiu Radulescu:

- C1. M. Abdelwahed, N. Chorfi, — , *Handling geometric singularities by the mortar spectral element method for fourth-order problems*, Electron. J. Differential Equations **2017** (2017), art. 82, 13 str.
- C2. G. A. Afrouzi, — , S. Shokoh, *Multiple solutions of Neumann problems: an Orlicz-Sobolev space setting*, Bull. Malays. Math. Sci. Soc. **40** (2017), 1591–1611.
- C3. B. Alleche, — , *Further on set-valued equilibrium problems and applications to Browder variational inclusions*, J. Optim. Theory Appl. **175** (2017), 39–58.
- C4. B. Alleche, — , *Inverse of the sum of set-valued mappings and applications*, Numer. Funct. Anal. Optim. **38** (2017), 139–159.
- C5. I. Bachar, H. MÂagli, — , *Positive solutions for superlinear Riemann-Liouville fractional boundary-value problems*, Electron. J. Differential Equations **2017** (2017), art. 240, 16 str.
- C6. I. Bachar, H. Mâagli, — , *Singular solutions of a nonlinear elliptic equation in a punctured domain*, Electron. J. Qual. Theory Differ. Equ. **2017** (2017), art. 94, 19 str.
- C7. S. Baraket, S. Chebbi, N. Chorfi, — , *Non-autonomous eigenvalue problems with variable (p_1, p_2) -growth*, Adv. Nonlinear Stud. **17** (2017), 781–792.
- C8. N. Chorfi, — , *Small perturbations of elliptic problems with variable growth*, Appl. Math. Lett. **74** (2017), 167–173.
- C9. B. Ge, — , Ji-C. Zhang, *Infinitely many positive solutions of fractional boundary value problems*, Topol. Methods Nonlinear Anal. **49** (2017), 647–664.
- C10. K. Kefi, — , *On a $p(x)$ -biharmonic problem with singular weights*, Z. Angew. Math. Phys. **68** (2017), art. 80, 13 str.
- C11. S. Liang, — , *Existence of infinitely many solutions for degenerate Kirchhoff-type Schrödinger-Choquard equations*, Electron. J. Differential Equations **2017** (2017), art. 230, 17 str.
- C12. N. S. Papageorgiou, — , *An infinity of nodal solutions for superlinear*

- Robin problems with an indefinite and unbounded potential*, Bull. Sci. Math. **141** (2017), 251–266.
- C13. N. S. Papageorgiou, — , *Asymmetric, noncoercive, superlinear $(p, 2)$ -equations*, J. Convex Anal. **24** (2017), 769–793.
- C14. N. S. Papageorgiou, — , *Infinitely many nodal solutions for semilinear Robin problems with an indefinite linear part*, Appl. Math. Lett. **64** (2017), 42–50.
- C15. N. S. Papageorgiou, — , *Multiplicity theorems for nonlinear nonhomogeneous Robin problems*, Rev. Mat. Iberoam. **33** (2017), 251–289.
- C16. N. S. Papageorgiou, — , *Noncoercive resonant $(p, 2)$ -equations*, Appl. Math. Optim. **76** (2017), 621–639.
- C17. N. S. Papageorgiou, — , *Periodic solutions for time-dependent subdifferential evolution inclusions*, Evol. Equ. Control Theory **6** (2017), 277–297.
- C18. N. S. Papageorgiou, — , *Positive solutions for parametric semilinear Robin problems with indefinite and unbounded potential*, Math. Scand. **121** (2017), 263–292.
- C19. N. S. Papageorgiou, — , *Robin problems near resonance at any non-principal eigenvalue*, Results Math. **71** (2017), 1389–1412.
- C20. N. S. Papageorgiou, — , *Robin problems with indefinite and unbounded potential, resonant at $-\infty$, superlinear at $+\infty$* , Tohoku Math. J. (2) **69** (2017), 261–286.
- C21. N. S. Papageorgiou, — , *Superlinear, noncoercive asymmetric Robin problems with indefinite, unbounded potential*, Z. Anal. Anwend. **36** (2017), 253–281.
- C22. — , I. Stăncuț, *Perturbation effects for a singular elliptic problem with lack of compactness and critical exponent*, Minimax Theory Appl. **2** (2017), 79–97.
- D1. Glavni urednik revije *Advances in Nonlinear Analysis*.
- D2. Glavni urednik revije *Boundary Value Problems*.
- D3. Član uredniškega odbora revije *Complex Variables and Elliptic Equations*.
- D4. Član uredniškega odbora revije *Electronic Journal of Differential Equations*.
- D5. Član uredniškega odbora revije *Journal of Mathematical Analysis and Applications*.
- D6. Član uredniškega odbora revije *Mathematics in Science and Engineering*.
- D7. Član uredniškega odbora revije *Nonlinear Analysis*.

- F1. *Two classical results with lack of monotonicity*, vabljeno predavanje, International conference “James Serrin: from His legacy to the new frontiers”, Università degli Studi di Perugia, Italija, januar/februar 2017.
- F2. *Equilibrium problems and applications to Browder variational inclusions*, vabljeno predavanje, Le premier congrès international sur la modélisation et le calcul scientifique en ingénierie mathématique MO-CASIM 17, Marakeš, Maroko, april 2017.
- F3. *Nonhomogeneous problems with singular weights*, vabljeno predavanje, 4th Conference on Recent Trends in Nonlinear Phenomena, Messina, Italija, september 2017.
- F4. *How much monotonicity is necessary in nonlinear PDEs?*, vabljeno predavanje, Politehnika Rzeszowska im. Ignacego Łukasiewicza, Rzeszów, Poljska, november 2017.
- F5. *Nonlinear eigenvalue problems: old and new*, vabljeno predavanje, Jagiellonian University, Krakov, Poljska, november 2017.
- F6. *Maximum principle and Keller-Osserman theorem revisited*, vabljeno predavanje, AGH University of Science and Technology, Krakov, Poljska, november 2017.

Dušan Repovš:

- C1. K. B. Andrist, D. Garity, —, D. Wright, *New techniques for computing geometric index*, *Mediterr. J. Math.* **14** (2017), art. 237, 15 str.
- C2. D. Garity, —, *Simply connected 3-manifolds with a dense set of ends of specified genus*, *Mediterr. J. Math.* **14** (2017), art. 109, 12 str.
- C3. T. Banakh, I. V. Protasov, —, *Classifying homogeneous cellular ordinal ballans up to coarse equivalence*, *Colloq. Math.* **149** (2017), 211–224.
- C4. T. Banakh, —, *Sequential rectifiable spaces of countable cs^* -character*, *Bull. Malays. Math. Sci. Soc.* **40** (2017), 975–993.
- C5. M. Cencelj, U. H. Karimov, —, *On the Alexandroff-Borsuk problem*, *Topology Appl.* **221** (2017), 114–120.
- C6. N. S. Papageorgiou, V. Rădulescu, —, *Multiple solutions for resonant problems of the Robin p -Laplacian plus an indefinite potential*, *Calc. Var. Partial Differential Equations* **56** (2017), art. 63, 23 str.
- C7. N. S. Papageorgiou, V. Rădulescu, —, *Nonhomogeneous hemivariational inequalities with indefinite potential and Robin boundary condition*, *J. Optim. Theory Appl.* **175** (2017), 293–323.
- C8. N. S. Papageorgiou, V. Rădulescu, —, *On a class of parametric $(p, 2)$ -equations*, *Appl. Math. Optim.* **75** (2017), 193–228.
- C9. N. S. Papageorgiou, V. Rădulescu, —, *Pairs of positive solutions for*

- resonant singular equations with the p -Laplacian*, Electron. J. Differential Equations **2017** (2017), art. 249, 13 str.
- C10. N. S. Papageorgiou, V. Rădulescu, — , *Positive solutions for perturbations of the Robin eigenvalue problem plus an indefinite potential*, Discrete Contin. Dyn. Syst. **37** (2017), 2589–2618.
- C11. N. S. Papageorgiou, V. Rădulescu, — , *Resonant semilinear Robin problems with a general potential*, Electron. J. Qual. Theory Differ. Equ. **2017** (2017), art. 70, 15 str.
- C12. N. S. Papageorgiou, V. Rădulescu, — , *Robin problems with a general potential and a superlinear reaction*, J. Differential Equations **263** (2017), 3244–3290.
- C13. N. S. Papageorgiou, V. Rădulescu, — , *Robin problems with indefinite linear part and competition phenomena*, Commun. Pure Appl. Anal. **16** (2017), 1293–1314.
- C14. N. S. Papageorgiou, V. Rădulescu, — , *Sensitivity analysis for optimal control problems governed by nonlinear evolution inclusions*, Adv. Nonlinear Anal. **6** (2017), 199–235.
- D1. Član uredniškega sveta revije *Advances in Nonlinear Analysis*.
- D2. Član uredniškega odbora revije *Boundary Value Problems*.
- D3. Član uredniškega odbora revije *Journal of Mathematical Analysis and Applications*.
- D4. Član uredniškega odbora revije *Mediterranean Journal of Mathematics*.
- D5. Član uredniškega odbora revije *Nonlinear Analysis and Differential Equations*.
- F1. *Nonlinear problems on the Sierpiński gasket*, vabljeno predavanje, Two nonlinear days in Urbino, Urbino, Italija, julij 2017.
- F2. *Nonlinear problems on the Sierpiński gasket*, vabljeno predavanje, 4th Conference on Recent Trends in Nonlinear Phenomena, Messina, Italija, september 2017.
- I1. Izvoljen za člana Evropske akademije znanosti in umetnosti.

Pavle Saksida:

- B1. *Nonlinear Fourier transform - towards the construction of nonlinear Fourier modes*, sprejeto v objavo v J. Phys. A, Math. Theor.
- C1. *On nonlinear Fourier transform : towards the nonlinear superposition*, 24th International Conference on Integrable Systems and Quantum

symmetries (ISQS-24), Praga, Češka, junij 2016, Conference Proceedings (Journal of physics. Conference series, 804), 10 str.

G1. *Nonlinear Fourier transform associated to the ZS-AKNS systems and some of its properties*, X. International Symposium “Quantum Theory and Symmetries” , Varna, Bolgarija, junij 2017.

I1. Mentorstvo pri enem delu diplomskega seminarja.

Raffaella Servadei:

C1. G. Molica Bisci, D. Mugnai, — , *On multiple solutions for nonlocal fractional problems via ∇ -theorems*, Differential Integral Equations **30** (2017), 641–666.

C2. G. Molica Bisci, V. Rădulescu, — , *Competition phenomena for elliptic equations involving a general operator in divergence form*, Anal. Appl. (Singap.) **15** (2017), 51–82.

C3. G. Molica Bisci, D. Repovš, — , *Nonlinear problems on the Sierpiński gasket*, J. Math. Anal. Appl. **452** (2017), 883–895.

D1. Članica uredniškega odbora revije *Electronic Journal of Differential Equations*.

F1. *Variational methods for nonlocal fractional problems*, vabljen predavanje, Two-day meeting on PDEs, Perugia, Italija, februar 2017.

F2. *Some recent results in nonlocal fractional problems*, vabljen predavanje, International Conference on Elliptic and Parabolic Problems, Zürich, Švica, maj 2017.

Marko Slapar:

F1. *On thom conjecture in CP^3* , vabljen predavanje, Analysis and Geometry in Several Complex Variables II, Al Rayyan, Katar, januar 2017.

F2. *On the thom conjecture in CP^2* , vabljen predavanje, Univerzitet u Beogradu, Srbija, maj 2017.

F3. *On totally real immersions and embeddings into \mathbb{C}^n* , vabljen predavanje, Mathematics Department na American University of Beirut, Libanon, junij 2017.

F4. *Totally real immersions and embeddings of simply connected 5-manifolds*, Vabljen predavanje, 1st Central European Complex Analysis Meeting, Dunaj, Avstrija, oktober 2018.

G1. *On the moduli space of quadratically flat complex points*, 19th ÖMG Congress and Annual DMV Meeting, Salzburg, Avstrija, september 2017.

I1. Mentorstvo pri 3 magistrskih in 4 diplomskih delih.

Tadej Starčič:

B1. *On regular Stein neighborhoods of a union of two maximally totally real subspaces in \mathbb{C}^n* , sprejeto v objavo v *Period. Math. Hungar.*

Nik Stopar:

B1. G. Dolinar, B. Kuzma, —, *Characterization of orthomaps on the Cayley plane*, sprejeto v objavo v *Aequationes Math.*

C1. *Nilpotent, algebraic and quasi-regular elements in rings and algebras*, *Proc. Edinb. Math. Soc.* (2) **60** (2017), 753–769.

Sašo Strle:

F1. *On the Thom conjecture in CP^3* , vabljeno predavanje, *Low Dimensional Topology and Gauge Theory*, Oaxaca, Mehika, avgust 2017.

I1. Mentorstvo pri 4 delih diplomskega seminarja.

I2. Odgovorni urednik revije *Obzornik za matematiko in fiziko*.

Peter Šemrl:

B1. *Groups of order automorphisms of operator intervals*, sprejeto v objavo v *Acta Sci. Math.* (Szeged).

B2. L. Plevnik, —, *Automorphisms of effect algebras*, sprejeto v objavo v *Oper. Theory Adv. Appl.*

C1. *Order and spectrum preserving maps on positive operators*, *Canad. J. Math.* **69** (2017), 1422–1435.

C2. *Order isomorphisms of operator intervals*, *Integral Equations Operator Theory* **89** (2017), 1–42.

D1. Glavni urednik revije *Linear Algebra and its Applications*.

- D2. Urednik revije *Linear and Multilinear Algebra*.
- D3. Član uredniškega odbora revije *Operators and Matrices*.
- E1. Član znanstvenega organizacijskega odbora konference *2017 International Linear Algebra Society Conference*, Ames, ZDA, julij 2017.
- F1. *Order isomorphisms of operator intervals*, kolokvijsko predavanje, Universität Bremen, Nemčija, maj 2017.
- F2. *Order isomorphisms of operator intervals*, vabljeno predavanje, Preservers Everywhere, Szeged,, Madžarska, junij 2017.
- F3. *Adjacency preservers*, LMS Invited Lecture, University of Reading, Velika Britanija, julij 2017.
- F4. *Order isomorphisms of operator intervals*, kolokvijsko predavanje, Sveučilište J. J. Strossmayera u Osijeku, Hrvaška, september 2017.
- F5. *Order isomorphisms of operator intervals*, plenarno predavanje, Korea-China International Conference on Matrix Theory with Applications, Suwon, Južna Koreja, december 2017.
- G1. *Order isomorphisms of operator intervals*, Positivity IX, Edmonton, Kanada, julij 2017.
- G2. *Order isomorphisms of operator intervals*, 28th International Workshop on Operator Theory and Applications (IWOTA), Chemnitz, Nemčija, avgust 2017.
- I1. Predsednik International Linear Algebra Society.

Klemen Šivic:

- B1. J. Bernik, — , *On certain graded representations of filiform Lie algebras*, sprejeto v objavo v *Linear Multilinear Algebra*.
- B2. I. Klep, S. McCullough, — , A. Zalar, *There are many more positive maps than completely positive maps*, sprejeto v objavo v *Int. Math. Res. Not. IMRN*.
- C1. M. Kandić, — , *On the dimension of the algebra generated by two positive semi-commuting matrices*, *Linear Algebra Appl.* **512** (2017), 136–161.
- C2. M. Kandić, — , *On the positive commutator in the radical*, *Positivity* **21** (2017), 99–111.
- G1. *Dimension of commuting varieties*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.

- G2. *Positive maps*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G3. *There are many more positive maps than completely positive maps*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G4. *Construction of positive maps that are not completely positive*, Sums of Squares - Real Algebraic Geometry and its Applications, Innsbruck, Avstrija, avgust 2017.
- G5. *Dimensions of commuting varieties*, TULSI Algebraic Geometry Meeting, Trst, Italija, december 2017.

Riste Škrekovski:

- B1. B. Lužar, M. Petruševski, — , *On vertex-parity edge-colorings*, sprejeto v objavo v J. Comb. Optim.
- C1. M. Knor, — , A. Tepeh, *Wiener index of digraphs*, poglavje v *Bounds in chemical graph theory : advances*, str. 141–153, Faculty of Science, University of Kragujevac, Srbija, 2017.
- C2. M. Knor, — , A. Tepeh, *Some bounds on balaban index*, *Bounds in chemical graph theory : advances*, 189–200, Faculty of Science, University of Kragujevac, Srbija, 2017,
- C3. V. Andova, D. Orlić, — , *Leapfrog fullerenes and Wiener index*, *Appl. Math. Comput.* **309** (2017), 281–288.
- C4. M. Bonamy, M. Knor, B. Lužar, A. Pinlou, — , *On the difference between the Szeged and the Wiener index*, *Appl. Math. Comput.* **312** (2017), 202–213.
- C5. D. Dimitrov, B. Ilica, — , *Remarks on maximum atom-bond connectivity index with given graph parameters*, *Discrete Appl. Math.* **222** (2017), 222–226.
- C6. D. Dimitrov, B. Ilica, — , *Remarks on the Graovac-Ghorbani index of bipartite graphs*, *Appl. Math. Comput.* **293** (2017), 370–376.
- C7. M. Knor, J. Kranjc, — , A. Tepeh, *On the minimum value of sum-Balaban index*, *Appl. Math. Comput.* **303** (2017), 203–210.
- C8. M. Knor, — , A. Tepeh, *A note on accumulation points of Balaban index*, *MATCH Commun. Math. Comput. Chem.* **78** (2017), 163–168.
- C9. M. Petruševski, — , *A note on acyclic number of planar graphs*, *Ars Math. Contemp.* **13** (2017), 317–322.
- C10. D. Vukičević, — , A. Tepeh, *Relative edge betweenness centrality*, *Ars Math. Contemp.* **12** (2017), 261–270.
- D1. Član uredniškega odbora revije *Mathematica Bohemica*.

- D2. Član uredniškega odbora revije *Matematički Bilten. Bulletin Mathématique de la Société des Mathématiciens de la République de Macédoine*.
- D3. Član uredniškega odbora revije *The art of discrete and applied mathematics*.
- F1. *Mathematical aspects of Balaban index*, vabljeno predavanje, Iowa State University, Arnes, ZDA, avgust 2017.
- F2. *On facial unique-maximum colorings*, vabljeno predavanje, Western Carolina University, Cullowhee, ZDA, avgust 2017.
- G1. *Graph-theoretic properties and invariants of fullerene graphs*, 52nd Czech-Slovak conference on Graph Theory, Hejnice, Češka, maj/junij 2017.
- G2. *Mathematical aspects of Balaban index*, 2nd Macedonian Workshop on Graph Theory and Its Applications, Ohrid, Makedonija, avgust 2017.
- G3. *Edge-colorings as edge-decompositions*, Workshop Cycles and Colourings 2017, Nový Smokovec, Češka, september 2017.
- G4. *On facial unique-maximum (edge-)coloring*, 30th Ljubljana - Leoben Graph Theory Seminar, Maribor, september 2017.

Simon Špacapan:

- B1. *On 3-colorings of direct products*, sprejeto v objavo v Discuss. Math. Graph Theory.
- I1. Mentorstvo pri eni magistrski nalogi.
- I2. Pisec recenzij v revijah European Journal of Combinatorics ter Journal of Combinatorial Theory. Series B.

Primož Šparl:

- C1. P. Potočnik, —, *On the radius and the attachment number of tetravalent half-arc-transitive graphs*, Discrete Math. **340** (2017), 2967–2971.
- C2. A. Ramos Rivera, —, *The classification of half-arc-transitive generalizations of Bower graphs*, European J. Combin. **64** (2017), 88–112.
- E1. Član znanstvenega odbora konference 7th *PhD Summer School in Discrete Mathematics*, Rogla, julij 2017.
- F1. *Grafovi i njihova povezanost sa šahom, saobraćajem i plesom ...*, vabljeno predavanje, Fakultetu za proizvodnju i menadžment, Trebinje, Bosna in Hercegovina, april 2017.

- F2. *On n -distance balanced graphs*, vabljeno predavanje, Prirodno-matematiški fakultet, Univerzitet u Sarajevu, Bosna in Hercegovina, december 2017.
- G1. *On the radius and the attachment number of tetravalent half-arc-transitive graphs*, 2nd Malta Conference in Graph Theory and Combinatorics 2017 (MCGTC-2017), Qawra, Malta, junij 2017.
- I1. Mentor pri 3 diplomskih delih in enem magistrskem delu.
I2. 3 recenzije za MathSciNet.

Janez Šter:

- C1. *Nil-clean quadratic elements*, J. Algebra Appl. **16** (2017), art. 1750197, 8 str.
- C2. M. Habibi, A. Moussavi, —, *A note on rings with McCoy-like properties*, Comm. Algebra **45** (2017), 2276–2279.

Aleš Toman:

- G1. *Robustness of the classical and recently developed exponential smoothing methods*, 17th ENBIS conference, Neapelj, Italija, september 2017.
- G2. *Statistics and financial mathematics competition for (high school) students in Slovenia - past advances and future challenges*, 14th International Conference on Applied Statistics, Ribno, september 2017.

Aleksej Turnšek:

- B1. D. Ilišević, —, *On superstability of the Wigner equation*, sprejeto v objavo v Linear Algebra Appl.
- C1. *A remark on orthogonality and symmetry of operators in $\mathcal{B}(\mathcal{H})$* , Linear Algebra Appl. **535** (2017), 141–150.
- C2. *Fuglede Putnam theorem in Banach algebras*, Bull. Lond. Math. Soc. **49** (2017), 937–945.

Riccardo Ugolini:

- C1. *A parametric jet-interpolation theorem for holomorphic automorphisms of \mathbb{C}^n* , J. Geom. Anal. **27** (2017), 2684–2699.

- F1. *A new notion of Tameness*, seminarsko predavanje, Universität Wuppertal, Nemčija, november 2017.
- G1. *Jet interpolation by automorphisms*, Conference on “Complex Analysis and Geometry - XXIII”, Levico Terme (Trento), Italija, junij 2017.

Aljaž Ule:

- C1. N. Bartsley, —, *Focal points revisited : team reasoning, the principle of insufficient reason and cognitive hierarchy theory*, Econom. Behavior Organization **133** (2017), 74–86.
- D1. Član uredniškega odbora revije *Serbian Journal of Management*.
- I1. Mentorstvo pri enem magistrskem delu.

Aleš Vavpetič:

- B1. M. Cencelj, J. Dydak, —, *Asymptotic dimension of coarse spaces via maps to simplicial complexes*, sprejeto v objavo v *Topology Appl.*
- C1. L. Lampret, —, *(Co)Homology of poset Lie algebras*, *Homology Homotopy Appl.* **19** (2017), 1–20.
- C2. L. Lampret, —, *Hochschild (co)homology of exterior algebras using algebraic Morse theory*, *Comm. Algebra* **45** (2017), 911–918.
- C3. —, Ž. Virk, *On the fundamental group of inverse limits*, *Bull. Malays' Math. Sci. Soc.* **40** (2017), 941–957.

Aleksander Vesel:

- B1. D. Korže, —, *(d, n) -packing colorings of infinite lattices*, sprejeto v objavo v *Discrete Appl. Math.*
- C1. *Dynamic algorithm for distance constrained labelings of graphs*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 448–452.
- C2. Z. Shao, F. Deng, Z. Li, —, *Graceful labelings of the generalized Petersen graphs*, *Commun. Comb. Optim.* **2** (2017), 149–159.
- C3. Z. Shao, —, J. Xu, *Frequency assignment problem in networks with limited spectrum*, *CEJOR Cent. Eur. J. Oper. Res.* **25** (2017), 699–723.

- C4. *Regular coronoids and 4-tilings*, Discrete Appl. Math. **231** (2017), 217–227.
- G1. *Dynamic algorithm for distance constrained labelings of graphs*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- I1. 6 recenzij za MathSciNet.
- I2. 2 recenziji za Zentralblatt MATH.

Matija Vidmar:

- B1. *Ruin under stochastic dependence between premium and claim arrivals*, sprejeto v objavo v Scand. Actuar. J.
- C1. *Proper two-sided exits of a Lévy process*, Statist. Probab. Lett. **125** (2017), 160–163.
- H1. *Problem izbire najboljše tajnice*, Obzornik Mat. Fiz. **64** (2017), št. 1, 1–9.

Žiga Virk:

- C1. K. Austin, —, *Higson compactification and dimension raising*, Topology Appl. **215** (2017), 45–57.
- C2. A. Vavpetič, —, *On the fundamental group of inverse limits*, Bull. Malays. Math. Sci. Soc. **40** (2017), 941–957.
- C3. —, A. Zastrow, *A new topology on the universal path space*, Topology Appl. **231** (2017), 186–196.
- G1. *Coarse dimension raising results*, Geometric Topology and Geometry of Banach Spaces, Eilat, Izrael, maj 2017.
- G2. *1-dimensional intrinsic persistence of closed Riemannian manifolds*, 19th ÖMG Congress and Annual DMV Meeting, Salzburg, Avstrija, september 2017.
- G3. *A comparison of topologies on the fundamental group*, 19th ÖMG Congress and Annual DMV Meeting, Salzburg, Avstrija, september 2017.
- G4. *Intrinsic 1-dimensional persistence of geodesic spaces*, FoCM 2017, Foundations of Computational Mathematics, Barcelona, Španija, julij 2017.
- I1. Avtor enega univerzitetnega učbenika.

Vito Vitrih:

- C1. M. Kapl, — , *Space of C^2 -smooth geometrically continuous isogeometric functions on planar multi-patch geometries : dimension and numerical experiments*, Comput. Math. Appl. **73** (2017), 2319–2338.
- C2. M. Kapl, — , *Space of C^2 -smooth geometrically continuous isogeometric functions on two-patch geometries*, Comput. Math. Appl. **73** (2017), 37–59.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D2. Urednik revije *The Art of Discrete and Applied Mathematics*.
- G1. *Space of C^2 smooth geometrically continuous isogeometric functions on planar multi-patch geometries*, Conference on Geometry: Theory and Applications, Plzeň, Češka, junij 2017.
- II. Mentorstvo pri enem magistrskem delu.

Aljaž Zalar:

- A1. *Contributions to a noncommutative real algebraic geometry*, doktorska disertacija, Univerza v Ljubljani, Fakulteta za matematiko in fiziko, Oddelek za matematiko, Matematika - 3. stopnja, Ljubljana, 2017.
- B1. I. Klep, S. McCullough, K. Šivic, — , *There are many more positive maps than completely positive maps*, sprejeto v objavo v Int. Math. Res. Not. IMRN.
- B2. A. Bhardwaj, — , *The singular bivariate quartic tracial moment problem*, sprejeto v objavo v Complex Anal. Oper. Theory.
- C1. *Operator Positivstellensätze for noncommutative polynomials positive on matrix convex sets*, J. Math. Anal. Appl. **445** (2017), 32–80.
- G1. *There are many more positive maps than completely positive maps*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G2. *There are many more positive maps than completely positive maps*, Sums of Squares – Real Algebraic Geometry and its Applications, Innsbruck, avgust 2017.

Lyubomyr Zdomskyy:

- C1. D. Repovš, — , *Products of Hurewicz spaces in the Laver model*, Bull. Symb. Log. **23** (2017), 324–333.
- C2. S. S. Gabrielyan, J. Grebík, J. Kąkol, — , *Topological properties of function spaces over ordinals*, Rev. R. Acad. Cienc. Exactas Fís. Nat. Ser. A Math. RACSAM **111** (2017), 1157–1161.
- C3. S. S. Gabrielyan, J. Kąkol, — , *On topological properties of the weak topology of a Banach space*, J. Convex Anal. **24** (2017), 571–586.
- C4. A. Medini, — , *Productively Lindelöf spaces of countable tightness*, Houston J. Math. **43** (2017), 1263–1272.
- C5. D. Sobota, — , *The Nikodym property in the Sacks model*, Topology Appl. **230** (2017), 24–34.
- C6. A. Medini, D. Repovš, — , *Non-meager free sets and independent families*, Proc. Amer. Math. Soc. **145** (2017), 4061–4073.
- F1. *Forcing and selection principles*, vabljeno predavanje, ASL North American Annual Meeting, E: Set Theory and Its Applications to Analysis and Topology, Boise State University, ZDA, marec 2017.
- G1. *Selective versions of separability*, Frontiers of Selection Principles, celebrating the 60th birthday of Marion Scheepers, Varšava, Poljska, avgust/september 2017.

Emil Žagar:

- B1. Emil Žagar, *Circular sector area preserving approximation of circular arcs by geometrically smooth parametric polynomials*, sprejeto v objavo v J. Comput. Appl. Math.
- G1. *General framework for approximation of circular arcs by G^k Parametric Polynomial Interpolants*, Conference on Geometry: Theory and Applications, Plzeň, Češka, junij 2017.
- G2. *General framework for approximation of circular arcs by G^k parametric polynomial interpolants*, SIAM Annual Meeting 2017, Pittsburgh, ZDA, julij 2017.

Janez Žerovnik:

- B1. Z. Shao, Z. Li, A. Peperko, J. Wan, — , *Independent rainbow domination of graphs*, sprejeto v objavo v Bull. Malays. Math. Sci. Soc.

- C1. D. Rupnik Poklugar, — , *On definition of sample quartiles*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 338–343.
- C2. T. Vizinger, T. Kokolj, — , *A robust optimization approach for better planning of a retail supply chain product flow*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017, SOR '17 proceedings, 220–225.
- C3. M. Čevnik, — , *Broadcasting on cactus graphs*, J. Comb. Optim. **33** (2017), 292–316.
- C4. D. Kaljun, T. Novak, — , *Improved approximation of spatial light distribution*, PloS one **12** (2017), 16 str.
- C5. D. Kaljun, — , *Improving approximation by switching between two error functions*, Croat. Oper. Res. Rev. CRORR **8** (2017), 107–118.
- C6. — , D. Rupnik Poklugar, *Elementary methods for computation of quartiles*, Teach. Stat. **39** (2017), 88–91.
- C7. H. Zupan, N. Herakovic, — , T. Berlec, *Layout optimization of a production cell*, Int. J. Simul. Model. **16** (2017), 603–616.
- D1. Član uredniškega odbora revije *Ars mathematica contemporanea*.
- D2. Član uredniškega odbora revije *Central European Journal of Operations Research*.
- D3. Član uredniškega odbora revije *Mathematics Interdisciplinary Research*.
- D4. Gostujoči urednik posebne številke revije *Central European Journal of Operations Research*.
- D5. Sourednik zbornika 14th *International Symposium on Operational Research in Slovenia*, Bled, september 2017.
- G1. *On definition of sample quartiles*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- G2. *A robust optimization approach for better planning of a retail supply chain product flow*, 14th International Symposium on Operational Research in Slovenia, Bled, september 2017.
- H1. *Računanje kvartilov v elementarni statistiki*, Obzornik Mat. Fiz. **64** (2017), št. 1, 20–31.
- I1. Predsednik Državne predmetne komisije za splošno maturo za matematiko.
- I2. Avtor enega univerzitetnega učbenika (popravljen in dopolnjen izdaja).
- I3. Recenzent 3 univerzitetnih učbenikov.

TUJI GOSTI

Oddelek za matematiko je v letu 2017 gostil naslednje tuje goste:

Edouard Bonnet, 1 teden, Middlesex University, London, Velika Britanija, marec 2017, na povabilo Sergia Cabella,

Csilla Bujtás, 4 dni, Alfréd Rényi Institute of Mathematics, Budimpešta, Madžarska, februar 2017, na povabilo Sandija Klavžarja,

Alessia Cattabriga, 2 tedna, University of Bologna, Bologna, Italija, april, oktober 2017, na povabilo Matije Cencija,

Oliver Cooley, 3 dni, TU Graz, Gradec, Avstrija, april 2017, na povabilo Sergia Cabella,

Gian Maria Dall'Ara, 6 dni, Universität Wien, Dunaj, Avstrija, marec 2017, na povabilo Oliverja Dragičevića,

Mikhailo Dokuchaev, 9 dni, University of Sao Paulo, Brazilija, januar 2017, na povabilo Ganne Kudryavtseve,

Polona Durcik, 1 dan, Universität Bonn, Nemčija, maj 2017, na povabilo Oliverja Dragičevića,

Jerzy Dydak, 2 meseca, University of Tennessee, Knoxville, ZDA, maj/junij 2017, na povabilo Matije Cencija,

Dmitry Feichtner-Kozlov, 1 teden, University of Bremen, Bremen, Nemčija, marec 2017, na povabilo Neže Mramor-Kosta,

John Erik Fornæss, 1 dan, Norges teknisk-naturvitenskapelige universitet, NTNU, Trondheim, Norveška, januar 2017, na povabilo Barbare Drinovec Drnovšek,

Marcell Gaáll, 4 dni, Functional Analysis Research Group, University of Szeged, Madžarska, december 2017, na povabilo Tatjane Petek,

Paul Gartside, 1 mesec, University of Pittsburgh, Pittsburgh, ZDA, maj 2017, na povabilo Dušana Repovša,

Panos Giannopoulos, 1 teden, Middlesex University, London, Velika Britanija, marec 2017, na povabilo Sergia Cabella,

Jovan Golić, 2 krat po 2 dni, Telecom Italia, Torino, Italija, januar, julij 2017, na povabilo Aleksandra Jurišića,

Denise Halverson, 2 meseca, Brigham Young University, Provo, ZDA, maj/junij 2017, na povabilo Dušana Repovša,

Friedrich Hegenbarth, 2 meseca, Università degli studi di Milano, Milano, Italija, oktober/november 2017, na povabilo Dušana Repovša,

Mike Henning, 1 teden, University of Johannesburg, Johannesburg, Južna Afrika, junij 2017, na povabilo Sandija Klavžarja,

Sara Kališnik Verovšek, 1 teden, Max Planck Institute for Mathema-

- tics in the Sciences, Leipzig, Nemčija, december 2017, na povabilo Dušana Repovša,
- Mihyun Kang**, 3 dni, TU Graz, Gradec, Avstrija, april 2017, na povabilo Sergia Cabella,
- Mykola Khrypchenko**, 9 dni, University of Santa Catarina, Florianopolis, Brazilija, januar 2017, na povabilo Ganne Kudryavtseve,
- Tom-Lukas Kriel**, 6 dni, Universität Konstanz, Nemčija, avgust 2017, na povabilo Igorja Klepa,
- Rastislav Krivoš-Belluš**, 5 dni, PJŠ University in Košice, Slovaška, april 2017, na povabilo Boštjana Brešarja,
- Michael Lang**, 4 mesece, Bradley University, Peoria, ZDA, avgust/december 2011, na povabilo Aleksandra Jurišiča,
- Erik Løw**, 1 dan, Universitetet i Oslo, Norveška, januar 2017, na povabilo Barbare Drinovec Drnovšek,
- Marijan Markovič**, 5 dni, Univerzitet Crne Gore, Podgorica, Črna Gora, september 2017, na povabilo Barbare Drinovec Drnovšek,
- Adam Osekowski**, 5 dni, Uniwersytet Warszawski, Varšava, Poljska, april 2017, na povabilo Oliverja Dragičevića,
- Mark Pankov**, 5 dni, University of Warmia and Mazury, Olsztyn, Poljska, november 2017, na povabilo Lucijana Plevnika,
- James Pascoe**, 2 tedna, Washington University, St. Louis, ZDA, avgust 2017, na povabilo Igorja Klepa,
- Balázs Patkós**, 4 dni, Alfréd Rényi Institute of Mathematics, Budimpešta, Madžarska, februar 2017, na povabilo Sandija Klavžarja,
- Håkan Persson**, 1 dan, Uppsala universitet, Švedska, januar 2017, na povabilo Barbare Drinovec Drnovšek,
- Nataša Pržulj**, 1 teden, University College London, Velika Britanija, april 2017, na povabilo Janeza Povha,
- Douglas Rall**, 10 dni, Furman University, Greenville, ZDA, maj/junij 2017, na povabilo Sandija Klavžarja,
- Joris Roos**, 1 dan, Universität Bonn, Nemčija, maj 2017, na povabilo Oliverja Dragičevića,
- Alex Safsten**, 1 mesec, Brigham Young University, Provo, ZDA, maj 2017, na povabilo Dušana Repovša,
- Konrad Schrempf**, 3dni, Technische Universität Graz, Avstrija, marec 2017, na povabilo Aljoše Peperka,
- Markus Schweighofer**, 2 dni, Universität Konstanz, Nemčija, marec 2017, na povabilo Jakoba Cimpriča,
- Gabriel Semanišin**, 5 dni, PJŠ University in Košice, Slovaška, april 2017, na povabilo Boštjana Brešarja,

Philipp Sprüssel, 3 dni, TU Graz, Gradec, Avstrija, april 2017, na povabilo Sergia Cabella,
Špela Špenko, 28 dni, Vrije Universiteit Brussel, Belgija, avgust 2017, na povabilo Igorja Klepa,
Pablo Torres, 10 dni, Universidad Nacional de Rosario, Argentina, oktober 2017, na povabilo Boštjana Brešarja,
Zsolt Tuza, 4 dni, Alfréd Rényi Institute of Mathematics, Budimpešta, Madžarska, februar 2017, na povabilo Sandija Klavžarja,
Ashok Vadekar, 4 dni, Sirius XM Satellite Radio, Waterloo, Kanada, februar 2017, na povabilo Aleksandra Jurišiča,
Máté Vizer, 4 dni, Alfréd Rényi Institute of Mathematics, Budimpešta, Madžarska, februar 2017, na povabilo Sandija Klavžarja,
Đorđije Vujadinović, 5 dni, Univerzitet Crne Gore, Podgorica, Črna Gora, september 2017, na povabilo Barbare Drinovec Drnovšek,
Kirsti Wash, 10 dni, Trinity College, Hartford, CT, ZDA, maj/junij 2017, na povabilo Sandija Klavžarja,
Jujie Wu, 1 dan, Henan University, Kaifeng, Kitajska, januar 2017, na povabilo Barbare Drinovec Drnovšek.

GOSTOVANJA

Člani oddelka za matematiko so bili v letu 2017 na naslednjih raziskovalnih obiskih oziroma študijskih izpopolnjevanjih v tujini:

Boštjan Brešar, 1 teden, Furman University, Greenville, ZDA, junij 2017,
Boštjan Brešar, 2 tedna, Université Paris XIII, Pariz, Francija, marec 2017,
Sergio Cabello, 3 dni, TU Graz, Gradec, Avstrija, april 2017,
Sergio Cabello, 1 teden, KAIST, Daejon, Južna Koreja, september 2017,
Miran Černe, 1 teden, Universidad de la Laguna, San Cristóbal de La Laguna, Tenerife, Španija, maj 2017,
Josip Globevnik, 1 mesec, Centre for Advanced Study at the Norwegian Academy of Science and Letters, Oslo, Norveška, april 2017,
Josip Globevnik, 4 dni, Univerzitet u Beogradu, Srbija, september 2017,
Josip Globevnik, 1 teden, Universidad de Granada, Španija, november 2017,
Igor Klep, 1 teden, University of Manchester, Velika Britanija, marec 2017,
Igor Klep, 1 teden, University College Dublin, Irska, marec 2017,
Tim Kos, 2 tedna, Universidad Nacional de Rosario, Argentina, junij/julij 2017,

Boštjan Kuzman, 3 tedne, Beijing Jiaotong University, Peking, Kitajska, september/oktober 2017,

Uroš Kuzman, 4 mesece, Det Kongelige Frederiks Universitet, Oslo, Norveška, marec/junij 2017,

Aleksander Malnič, 4 dni, Universidad de Barcelona, Španija, oktober 2017,

Aleksander Malnič, 1 teden, Univerza v Perugii, Perugia, Italija, november 2017,

Aleksander Malnič, 5 dni, Univerzitet u Sarajevu, Bosna in Hercegovina, december 2017,

Štefko Miklavič, 8 dni, University of Wisconsin - Madison, ZDA, november 2017,

Neža Mramor-Kosta, 1 teden, Middle Eastern Technical University, Ankara, Turčija, oktober 2017,

Polona Oblak, 3 mesece, University College Dublin, Irska, april/junij 2017,

Marko Orel, 11 tednov; nadaljevanje iz l. 2016, Sveučilište u Rijeci, Reka, Hrvaška, januar/marec 2017,

Aljoša Peperko, 6 dni, Institute of Mathematics of the Czech Academy of Sciences, Praga, Češka, oktober 2017,

Tatjana Petek, 1 mesec, Shanghai Normal University, Kitajska, avgust/september 2017,

Nik Stopar, 3 mesece, Univerzitet u Banjoj Luci, Banja Luka, Bosna in Hercegovina, april/junij 2017,

Klemen Šivic, 5 dni, Univerzitet u Banjoj Luci, Banja Luka, Bosna in Hercegovina, december 2017,

Emil Žagar, 3 mesece, Matematický ústav, Univerzita Karlova, Praga, Češka, oktober/december 2017.

SEMINARJI

Seminar za algebro in funkcionalno analizo

Vodji seminarja sta Roman Drnovšek in Primož Moravec. V letu 2017 je seminar imel 29 sestankov, na katerih je bilo v povprečju 9 poslušalcev.

Spletna stran seminarja je: <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-algebra-funkcionalna/>

Aljoša Peperko, *Generalizations of Krein-Rutman theorem*, 5. 1.,

Aljaž Zalar, *There are many more positive maps than completely positive maps*, 12. 1.,

- Michael Kaplin**, *Chaotic Black-Scholes evolution family*, 19. 1.,
Michael Dokuchaev, *Algebras related to subshifts via partial actions*, 26. 1. (45 minut),
Mykola Khrypchenko, *Partial actions and a theorem of O'Carroll*, 26. 1. (45 minut),
Janez Šter, *Čisti in von Neumannovo regularni elementi v kolobarjih*, 23. 2.,
Aljaž Zalar, *Operator Positivstellensätze on matrix convex sets*, 2. 3.,
Konrad Schrempf, *Factorizing non-commutative Polynomials and Linearizing the Word Problem in (some) Free Fields*, 9. 3.,
Marjeta Kramar Fijavž, *Koopman Semigroups*, 16. 3.,
Nik Stopar, *Struktura kotnih algebr*, 23. 3.,
Bojan Kuzma, *Fundamental theorem on orthomaps (and beyond)*, 30. 3.,
Damjana Kokol Bukovšek, *Jordan triple homomorphisms on triangular matrices from dimension one*, 6. 4.,
Marko Orel, *O končnem prostoru Minkowskega in o obstoju ovoidov v ortogonalnem polarnem prostoru*, 13. 4.,
Igor Klep, *Neenakosti*, 20. 4.,
Janez Bernik, *O neki eliptični ploskvi (ali kako sem vzljubil programe za simbolno računanje II)*, 4. 5.,
Janez Povh, *Nove aproksimacije za polinomske optimizacijske probleme nad stožci*, 11. 5.,
Gregor Cigler, *Signature matrix algebras*, 18. 5.,
Matej Brešar, *Določenost z ničelnim produktom*, 25. 5.,
Marko Kandić, *Unbounded norm convergence*, 1. 6.,
Michael Kaplin, *Linear Parabolic Equations on Metric Graphs*, 5. 9.,
Roman Drnovšek, *On algebras generated by positive operators*, 5. 10.,
Primož Moravec, *Exponents of Bogomolov multipliers*, 12. 10.,
Lucijan Plevnik, *Neenakosti med produkti potenc pozitivno semidefinitnih matrik*, 19. 10.,
Jurij Volčič, *Proste raznoterosti nekomutativnih polinomov in faktorizacija v prosti algebri*, 26. 10.,
Mark Pankov, *Wigner's theorem and its generalizations*, 9. 11.,
Jaka Cimprič, *Local linear dependence of linear partial differential operators*, 16. 11.,
Aljoša Peperko, *Inequalities for the generalized, joint and essential joint spectral radius of positive kernel operators*, 23. 11.,
Ganna Kudryavtseva, *Prime representations of inverse semigroups*, 30. 11.,
Marcell Gaal, *Isometries of matrices*, 7. 12.,

Aljaž Zalar, *The singular bivariate quartic tracial moment problem*, 14. 12.

Seminar IMFM in FNM v Mariboru iz diskretne matematike

Seminar vodita Boštjan Brešar in Sandi Klavžar. V letu 2017 je imel 25 srečanj. V povprečju je bilo na seminarju 12 udeležencev. Najbolj obiskano predavanje je bilo 5. 6. 2017 (17 poslušalcev). Domača stran seminarja je na naslovu: <http://omr.fnm.um.si/index.php/category/seminar-iz-diskretne-matematike/>.

Mojca Bračič, *Konstrukcije prekrizno-kritičnih grafov s predpisanimi lastnostmi*, 1. del, 9. 1.,

Mojca Bračič, *Konstrukcije prekrizno-kritičnih grafov s predpisanimi lastnostmi*, 2. del, 16. 1.,

Marko Jakovac, *Varne množice v leksikografskem produktu*, 20. 2.,

Aleksander Vesel, *(s, t)-sproščene $L(2, 1)$ označitve grafov*, 27. 2.,

Wilfried Imrich, *Distinguishing trees and subcubic graphs*, 6. 3.,

Tim Kos, *Grundyjeva celotna dominantna števila: realizacija in algoritmični vidiki*, 13. 3.,

Andreas M. Hinz, *The Star Tower of Hanoi*, 20. 3.,

Andreas M. Hinz, *Finite sets and the pigeonhole principle*, 27. 3.,

Tilen Marc, *Minorji v delnih kockah*, 3. 4.,

Rastislav Krivoš-Belluš (PJŠ University in Košice, Slovaška), *k-path partition and k-path vertex cover*, 10. 4.,

Gabriel Semanišin, *Some bounds on the generalised total chromatic number of degenerate graphs*, 10. 4.,

Vladislav V. Kabanov (Russian Academy of Sciences, Yekaterinburg, Rusija), *Some properties of finite fields and their applications to generalizations of strongly regular graphs*, 24. 4.,

Andreas M. Hinz, *The 3-smooth sequence*, 8. 5.,

Tanja Gologranc, *Algoritmični vidiki konveksne dominacije*, 15. 5.,

Sandi Klavžar, *Marjetične kocke*, 22. 5.,

Paul Gartside (University of Pittsburgh, ZDA), *Characterizations and Eulerian Loops*, 29. 5.,

Gunnar Brinkmann (Ghent University, Belgija), *A formal approach to operations on polyhedra*, 5. 6.,

Kirsti Wash (Trinity College, Harford, ZDA), *Well-covered Cartesian products*, 5. 6.,

- Sandi Klavžar**, *Množice vozlišč v splošni legi*, 9. 10.,
Pablo Torres (Universidad Nacional de Rosario, Argentina), *Stable Kneser graphs: problems and conjectures*, 16. 10.,
Iztok Peterin, *Splošna lega vozlišč v grafih Sierpińskega*, 23. 10.,
Jasmina Ferme, *Pakirna barvanja grafov tipa Sierpińskega*, 6. 11.,
Andreas M. Hinz, *The Hanoi Graph H_4^3* , 13. 11.,
Boštjan Brešar, *Dominacijska zaporedja in sorodne invariante grafov*, 20. 11.,
Éva Czabarka (University of South Carolina, ZDA), *Analogies between the crossing number and the tanglegram crossing number*, 27. 11.

Seminar za verjetnost, statistiko in finančno matematiko

Vodje seminarja so Janez Bernik, Tomaž Košir in Mihael Perman. V letu 2017 se je zvrstilo 12 predavanj, na katerih je bilo v povprečju 12 poslušalcev. Informacije o seminarju so dostopne na spletnem naslovu <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-financna-matematika/>.

- Martin Raič**, *Existence of measures and conditional distributions*, 1. del, 9. 3.,
Martin Raič, *Existence of measures and conditional distributions*, 2. del, 16. 3.,
Urban Ulrych, *Optimal hedging of FX-exposure for international asset allocation*, 23. 3.,
Erik Štrumbelj, *Računske metode za uporabno Bayesovo statistiko*, 1. 6.,
Janko Gravner, *Growth dynamics in Hamming graphs*, 6. 6.,
Simon Skok, *Counterparty risk management for central counterparties after the financial crisis*, 8. 6.,
Rok Okorn, *Problemi v proizvodni liniji in možne rešitve s pomočjo strojnega učenja*, 21. 6.,
Tomaž Košir, *Uvod v algebraično statistiko*, 26. 10.,
Tomaž Košir, *Inverzne maxmin kopule*, 9. 11.,
Matija Vidmar, *Independence times for i.i.d. sequences, random walks and Lévy processes*, 16. 11.,
Egon Zakrajšek, *Financial heterogeneity and monetary union*, 7. 12.,
Tea Brašanac, *Managing concept drift in machine learning methods on financial data*, 14. 12.

Seminar iz geometrije

Seminar iz geometrije se sestaja enkrat tedensko, vsak ponedeljek ob 10. uri. Vodijo ga Franci Forstnerič, Tomaž Košir, Janez Mrčun in Pavle Saksida. Na seminarju so bili v povprečju 4 poslušalci. V letu 2017 smo pripravili 7 predavanj. Spletna stran seminarja je <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-geometrija/>.

Blaž Jelenc, *Homotopnost preslikav med Liejevimi algebroidi*, 2. del, 9. 1.,

Janez Mrčun, *Monodromija*, 1. del, 16. 1.,

Janez Mrčun, *Monodromija*, 2. del, 23. 1.,

Rok Gregorič, *Afina premica v krasni novi geometriji*, 15. 5.,

Rok Gregorič, *Representations, loop spaces, and Riemann-Roch*, 22. 5.,

Rok Gregorič, *2-categorical trace, dimension, and Riemann-Roch*, 29. 5.,

Rok Gregorič, *Brave new projective geometry*, 5. 6.

Seminar za geometrijsko topologijo

Seminar ima spletno stran <http://www.pef.uni-lj.si/sgt/>.

Vodji seminarja sta Matija Cencelj in Dušan Repovš. V letu 2017 je bilo 23 sestankov.

Matija Cencelj, *Residualne lastnosti koralnih grup*, 18. 1. (2 uri),

Neža Mramor-Kosta, *Vztrajna homologija in metoda glavnih komponent*, 1. 3. (2 uri),

Jaka Smrekar, *Dvigi zunanjih avtomorfizmov končnega reda*, 8. 3. (2 uri),

Aleš Vavpetič, *Torzija homologije Liejeve algebre strogo zgornje trikotnih matrik*, 15. 3. (2 uri),

Boštjan Gabrovšek, *Moduli in invariante dobljene z rekurzivnimi relacijami*, 22. 3. (2 uri),

Dmitry Feichtner-Kozlov, *The first Cheeger constant of a simplex*, 29. 3. (2 uri),

Alessia Cattabriga, *Complexity of (non-orientable) Seifert fibre spaces*, 5. 4. (2 uri),

Boštjan Gabrovšek, *Teorija vozlov in kit v 3-mnogoterostih*, 12. 4. (2 uri),

Eva Horvat, *Struktura quandle in preštevalne invariante vozlov*, 19. 4. (2 uri),

Paul Gartside, *Graph-like Continua: Characterizations and Eulerian Loops*, 10. 5. (2 uri),

- Alex Safsten**, *The infinite dimensional Busemann Geodesic space*, 17. 5. (2 uri),
- Denise Halverson**, *Decision Based Learning and Applications in Mathematics and Topology*, 24. 5. (2 uri),
- Jerzy Dydak**, *Extension theorems via neighborhood operators*, 31. 5. (2 uri),
- Jerzy Dydak**, *Variants of decomposition complexity in coarse geometry*, 7. 6. (2 uri),
- Dejan Govc**, *Unimodal category*, 21. 9. (2 uri),
- Alessia Cattabriga**, *Algebraic structure as link invariants*, 4. 10. (2 uri),
- Dejan Govc**, *Aproksimativni izrek o živcu, primeri*, 11. 10. (2 uri),
- Friedrich Hegenbarth**, *Steenrod L-homology and representation of elements*, 25. 10. (2 uri),
- Boštjan Gabrovšek**, *Plat dekompozicije vozlov v 3-mnogoterostih*, 8. 11. (2 uri),
- Matija Cencelj**, *Izoperimetrija dreves in (ne)amenabilnost*, 22. 11. (2 uri),
- Neža Mramor-Kosta**, *Simplicialna topološka kompleksnost*, 29. 11. (2 uri),
- Petar Pavešič**, *Dobra pokritja in homotopske triangulacije*, 13. 12. (2 uri),
- Sara Kališnik Verovšek**, *Vztrajni skelet v višjih dimenzijah*, 20. 12. (2 uri).

Seminar za teorijo grup in kombinatoriko

Vodje seminarja so Aleksander Malnič, Dragan Marušič in Primož Šparl. V letu 2017 se je seminar redno sestel 21 krat. Predavali so:

- Daniel Pellicer**, *An introduction to polytopes*, 1. del, 11. 1.,
- Daniel Pellicer**, *An introduction to polytopes*, 2. del, 18. 1.,
- Primož Šparl**, *On n -distance-balanced graphs*, 1. 2.,
- Péter Juhász**, *The Lajos Pósa method and discovery based approach for the gifted students*, 3. 2.,
- Daniel Pellicer**, *An introduction to polytopes*, 3. del, 15. 2.,
- Jose Antonio Montero Aguilar**, *Cubic toroids with few flag orbits*, 23. 2.,
- Aleksander Malnič**, *Vertex- and edge-transitive graphs over doubled cycles*, 1. del, 15. 3.,
- Matthew Johnson**, *Kempe equivalence in regular graphs*, 22. 3.,
- Aleksander Malnič**, *Vertex- and edge-transitive graphs over doubled cycles*, 2. del, 29. 3.,
- Boštjan Kuzman**, *Some constructions of 4-valent symmetric graphs*, 5. 4.,
- Primož Šparl**, *On the radius and the attachment number of tetravalent half-arc-transitive graphs*, 12. 4.,

Aleksander Malnič, *Vertex- and edge-transitive graphs over doubled cycles*, 3. del, 10. 5.,

Alejandra Ramos Rivera, *On 2-orbit arc-transitive maps*, 17. 5.,

Aleksander Malnič, *Vertex- and edge-transitive graphs over doubled cycles*, 4. del, 24. 5.,

Primož Šparl, *Symmetry properties of generalized graph truncations*, 31. 5.,

Primož Šparl, *Poročila s konferenc in plan dela v študijskem letu 2017/2018*, 26. 10.,

Boštjan Kuzman, *BiCayleyevi grafi*, 2. 11.,

Aleksander Malnič, *Refleksibilni polinomi*, 6. 11.,

Jurij Kovič, *Kombinatorične in geometrijske konfiguracije*, 23. 11.,

Eva Horvat, *Strukturi "rack" in "quandle" ter preštevalne invariante vozlov*, 11. 12.,

Marko Razpet, *Peter Ludvig Meidell Sylow in njegovi izreki*, 21. 12.

Seminar za kompleksno analizo

Seminar za kompleksno analizo vodita Josip Globevnik in Franc Forstnerič. Rednih članov je bilo 14. Sestajal se je praviloma enkrat tedensko. Spletno stran najdemo na naslovu: <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-kompleksna-analiza/>. V letu 2017 je imel 27 sestankov in povprečno 13 poslušalcev.

Franc Forstnerič, *New complex analytic methods in the study of non-orientable minimal surfaces in \mathbb{R}^n* , 10. 1.,

Jujie Wu, *Holomorphic approximation and applications of weighted L^2 estimates for the \bar{d} -equation*, 17. 1.,

Håkan Persson, *Approximation of plurisubharmonic functions*, 17. 1.,

Riccardo Ugolini, *Parametric jet interpolation on manifolds with the density property*, 28. 2.,

Oliver Dragičević, *L^p -dissipativity of sesquilinear forms associated with complex accretive matrices*, 7. 3.,

Oliver Dragičević, *Reverse Hölder inequalities for weak solutions to elliptic PDE in divergence form with complex coefficients*, 14. 3.,

Pavle Saksida, *On nonlinear Fourier transform*, 21. 3.,

Gian Maria Dall'Ara, *On noncompactness of the \bar{d} -bar-Neumann problem on pseudoconvex domains in C^3* , 28. 3.,

Rafael B. Andrist, *The density property for Gizatullin surfaces*, 4. 4.,

Franc Forstnerič, *Proper holomorphic immersions and embeddings of Stein manifolds into Stein manifolds with the (volume) density property*, 18. 4.,

- Adam Osękowski**, *A sharp weighted L^p bound for dyadic-like maximal operators*, 25. 4.,
- Polona Durcik**, *Entangled multilinear forms and applications*, 9. 5.,
- Joris Roos**, *Maximal operators related to curves in the plane*, 16. 5.,
- Brett Chenoweth**, *Carleman approximation on totally real sets*, 30. 5.,
- Luca Studer**, *Oka theory and the holomorphic linearization problem*, 6. 6.,
- Mitja Nedić**, *An integral representation for Herglotz-Nevanlinna functions in several variables and its consequences*, 27. 6.,
- Marijan Marković**, *Norm of the Bergman projection*, 21. 9.,
- Uroš Kuzman**, *Approximation of non-holomorphic maps in almost complex manifolds*, 17. 10.,
- Miran Černe**, *Nonlinear Riemann–Hilbert problems*, 1. del, 24. 10.,
- Miran Černe**, *Nonlinear Riemann–Hilbert problems*, 2. del, 7. 11.,
- Riccardo Ugolini**, *A new notion of tameness*, 14. 11.,
- Daniel Ruberman**, *Configurations of embedded spheres*, 15. 11.,
- Franc Forstnerič**, *A properly embedded holomorphic disc in the ball with finite area and dense boundary curve*, 21. 11.,
- Szymon Pliś**, *Plurisubharmonic functions on almost complex manifolds*, 28. 11.,
- Marko Slapar**, *On normal forms of complex points of codimension 2 submanifolds*, 5. 12.,
- Barbara Drinovec Drnovšek**, *The strong halfspace theorem for minimal surfaces*, 12. 12.,
- Brett Chenoweth**, *Carleman approximation of maps into Oka manifolds*, 19. 12.

Seminar iz kriptografije in teorije kodiranja

Vodja seminarja je Aleksandar Jurišić. Seminar je v letu 2017 imel 28 sestankov in 10 delavnic (skupno 108 ur). V povprečju je bilo na seminarju 7 udeležencev.

Domača stran seminarja je na naslovu:

<http://lkrv.fri.uni-lj.si/~ajurisic/seminar/index.html>.

V letu 2017 so se zvrstila naslednja predavanja:

Aleksandar Jurišić, *Hacking*, 6. del, 5. 1. (2 uri),

Leon Lampert, *Lokalno ciklični razdaljno-regularni grafi*, 12. 1. (2 uri).

39. DELAVNICA IZ KRIPTOGRAFIJE IN RAČUNALNIŠKE VARNOSTI

- Mia Filić**, *GNSS & GPS*, 31. 1. (15 min),
Filip Langr, *Mental poker (Miselni poker)*, 31. 1. (15 min),
Dejan Benedik, *PRNG in Linux (PRNG v Linuxu)*, 31. 1. (15 min),
Fedja Bader, *Factorization of Polynomials (Faktorizacija polinomov)*, 31. 1. (15 min),
Blaž Repas, *Wireless devices (Brezžične naprave)*, 31. 1. (15 min),
Nejc Kišek, *Identification and RFID (Identifikacija in RFID)*, 31. 1. (15 min),
Rok Ivanšek, *Symmetric Ciphers and machine learning (Simetrične šifre in strojno učenje)*, 31. 1. (15 min),
Tihana Britvić, *Attacks on ElGamal (Napadi na kriptosistem ElGamal)*, 31. 1. (15 min),
žiga Pušnik, *Primality testing (Testiranje praštevilskosti)*, 31. 1. (15 min),
Martin Beránek, *Elliptic curves on smart cards (Eliptične krivulje na pametnih karticah)*, 31. 1. (15 min),
Janez Štular, *Security of SMS (Varnost SMS)*, 31. 1. (15 min),
Matej Zavrtanik, *HMAC (Zgoščevalna funkcija HMAC)*, 31. 1. (15 min),
Erik Kristian Janežič, *Elizika*, 31. 1. (15 min),
Jakob Makovac, *Stream cipher RC4 (Tokovna šifra RC4)*, 31. 1. (15 min),
Tilen Kavčič, *Digital money FRICoin (Digitalni denar)*, 31. 1. (15 min),
Bojana Todorović, *DLMS/COSEM*, 31. 1. (15 min)

- Aleksandar Jurišić**, *Aplikacija e-Quiz in Signali*, 9. 2. (4 ure),
Leon Lampert, *Posplošeni četverokotnik $GQ(2,2)$* , 2. 3. (2 uri),
Aleksandar Jurišić, *Geometrije in grafi*, 1. del, 9. 3. (2 uri),
Aleksandar Jurišić, *Geometrije in grafi*, 2. del, 16. 3. (2 uri).

40. DELAVNICA

- Aleksandar Jurišić**, *eQuiz*, 1. del, 16. 3. (4 ure),
Aleksei Protasov, *Probability projects (Projekti iz verjetnosti)*, 14. 4. (2 uri)

41. DELAVNICA

- Janoš Vidali**, *eQuiz (Python)*, 2. del, 5. 5. (3 ure),
Leon Lampert, *Varnost IoT (Internet of Things)*, 18. 5. (2 uri),
Leon Lampert, *Brezžična senzorska omrežja (dva protokola za dogovor*

o ključu), 25. 5. (2 uri),

Aleksandar Jurišić, *Uvod v varnost protokolov*, 1. 6. (2 uri),

Aleksandar Jurišić, *Kriptogram*, 1. del, 7. 6. (2 uri),

Aleksandar Jurišić, *Kriptogram*, 2. del, 8. 6. (2 uri),

Aleksandar Jurišić, *Aplikacija eQuiz*, 3. del, 9. 6. (2 uri)

42. DELAVNICA

Aleksandar Jurišić, *eQuiz*, 4. del, 14. 6. (4 ure),

Blaž Kostanjšek, *Uporaba verige blokov za zagotavljanje zaupanja in integritete podatkov v obstoječih sistemih*, 15. 6. (2 uri),

Aleksandar Jurišić, *Kriptogram*, 3. del, 15. 6. (2 uri)

43. DELAVNICA

Aleksandar Jurišić, *eQuiz*, 5. del, 21. 6. (8 ur)

44. DELAVNICA

Aleksandar Jurišić, *eQuiz*, 6. del, 29. 6. (8 ur)

45. DELAVNICA

Aleksandar Jurišić, *eQuiz*, 7. del, 12. 7. (4 ure),

Aleksandar Jurišić, *Kriptogram*, 4. del, 12. 7. (2 uri)

46. DELAVNICA

Aleksandar Jurišić, *eQuiz*, 8. del, 17. 7. (4 ure)

47. DELAVNICA

Aleksandar Jurišić, *eQuiz*, 9. del, 19. 7. (4 ure)

48. DELAVNICA

Aleksandar Jurišić, *eQuiz*, 10. del, 20. 7. (1 ura),

Andraž Dobnikar, *eQuiz*, 11. del, 20. 7. (3 ure)

Aleksandar Jurišić, *Kriptogram*, 5. del, 3. 8. (1 ura),

- Aleksandar Jurišić**, *Kriptogram*, 6. del, 8. 8. (1 ura),
Aleksandar Jurišić, *Kriptogram*, 7. del, 1. 9. (2 uri),
Aleksandar Jurišić, *Kriptogram*, 8. del, 26. 9. (2 uri),
Janoš Vidali, *Popolnoma regularni grafi klik znanega tipa*, 23. 10. (2 uri),
Aleksandar Jurišić, *Algebraična teorija grafov - tehnike z lastnimi vrednostmi*, 6. 11. (3 ure),
Aleksandar Jurišić, *Asociativne sheme*, 1. del, 13. 11. (3 ure),
Aleksandar Jurišić, *Asociativne sheme*, 2. del, 20. 11. (3 ure),
Aleksandar Jurišić, *Krepko regularni grafi*, 1. del, 27. 11. (3 ure),
Aleksandar Jurišić, *Krepko regularni grafi*, 2. del, 4. 12. (3 ure),
Aleksandar Jurišić, *Kode*, 11. 12. (3 ure),
Aleksandar Jurišić, *Razdaljno regularni grafi*, 1. del, 18. 12. (3 ure).

Seminar za numerično analizo

Seminar za numerično analizo vodi Bor Plestenjak. Seminar se je v letu 2017 sestal petindvajsetkrat. V povprečju je bilo na seminarju 10 udeležencev. Podatki o delu seminarja so dostopni na naslovu <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-numericna-analiza/>.

- Marjeta Krajnc**, *Interpolacija s prostorskimi racionalnimi PH krivuljami razreda 4*, 3. del, 4. 1. (1 ura),
Marjeta Krajnc, *Interpolacija s prostorskimi racionalnimi PH krivuljami razreda 4*, 4. del, 11. 1. (1 ura),
Bor Plestenjak, *Novosti v paketu MultiParEig za reševanje večparametričnih problemov lastnih vrednosti*, 18. 1. (1 ura),
Emil Žagar, *Optimalna G^k zvezna aproksimacija krožnih lokov s parametričnimi polinomskimi krivuljami*, 1. del, 22. 2. (1 ura),
Emil Žagar, *Optimalna G^k zvezna aproksimacija krožnih lokov s parametričnimi polinomskimi krivuljami*, 2. del, 1. 3. (1 ura),
Bor Plestenjak, *Routh-Hurwitzov kriterij*, 8. 3. (1 ura),
Emil Žagar, *Optimalna G^k zvezna aproksimacija krožnih lokov s parametričnimi polinomskimi krivuljami*, 3. del, 22. 3. (1 ura),
Boštjan Kovač, *Geometrijska aproksimacija krožnih lokov*, 1. del, 29. 3. (1 ura),
Boštjan Kovač, *Geometrijska aproksimacija krožnih lokov*, 2. del, 12. 4. (1 ura),
Ivan Slapničar, *Forward stable eigenvalue decomposition of real symmetric arrowhead matrices and rank-one modifications of diagonal matrices*, 19. 4. (2 uri),

Michiel Hochstenbach, *Recent progress in the solution of linear discrete ill-posed problems*, 26. 4. (1 ura),

Marjeta Krajnc, *Super zlepki stopnje 5 nad triangulacijami*, 10. 5. (1 ura),

Vito Vitrih, *Prostori C^k geometrijsko zveznih izogeometričnih funkcij nad ravninskimi domenami*, 1. del, 17. 5. (1 ura),

Vito Vitrih, *Prostori C^k geometrijsko zveznih izogeometričnih funkcij nad ravninskimi domenami*, 2. del, 24. 5. (1 ura),

Teja Tušar, *Večkriterijska optimizacija z evolucijskimi algoritmi*, 31. 5. (1 ura),

Marjeta Knez, *Poročila s konferenc*, 11. 10. (1 ura),

Bor Plestenjak, *Poročila s konferenc*, 18. 10. (1 ura),

Jure Slak, *Reševanje PDE z brez mrežnimi metodami*, 1. del, 25. 10. (1 ura),

Jure Slak, *Reševanje PDE z brez mrežnimi metodami*, 2. del, 8. 11. (1 ura),

Timotej Hrga, *Metoda robnih elementov*, 1. del, 15. 11. (1 ura),

Timotej Hrga, *Metoda robnih elementov*, 2. del, 22. 11. (1 ura),

Jan Grošelj, *Kvadratični zlepki nad 10-delitvijo triangulacije*, 1. del, 29. 11. (1 ura),

Jan Grošelj, *Kvadratični zlepki nad 10-delitvijo triangulacije*, 2. del, 6. 12. (1 ura),

Marjeta Knez, *Optimalna geometrijsko zvezna interpolacija krožnih lokov s polinomskimi krivuljami*, 1. del, 13. 12. (1 ura),

Marjeta Knez, *Optimalna geometrijsko zvezna interpolacija krožnih lokov s polinomskimi krivuljami*, 2. del, 20. 12. (1 ura).

Topološki seminar

Seminar je imel v povprečju 12 udeležencev, vodil pa ga je Petar Pavešić. V letu 2017 se je zvrstilo 29 predavanj o raznih temah. Domača stran seminarja je na: <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-topologija/>.

Rok Gregorič, *Operade in multikategorije*, 3. del, 7. 1.,

Rok Gregorič, *Graded E_∞ -rings and projective geometry over the sphere spectrum*, 16. 1.,

Rok Gregorič, *Operade in multikategorije*, 4. del, 23. 1.,

Rok Gregorič, *S-moduli*, 1. del, 20. 2.,

Rok Gregorič, *S-moduli*, 2. del, 27. 2.,

Rok Gregorič, *S-moduli*, 3. del, 6. 3.,

Petar Pavešić, *O vplivu fundamentalne grupe na topološko kompleksnost*, 13. 3.,

- Marko Slapar, *Totalno realne vložitve*, 1. del, 20. 3.,
 Marko Slapar, *Totalno realne vložitve*, 2. del, 27. 3.,
 Sašo Strle, *Dokaz izreka o indeksu: Toplotni operator*, 1. del, 3. 4.,
 Sašo Strle, *Dokaz izreka o indeksu: Toplotni operator*, 2. del, 10. 4.,
 Sašo Strle, *Dokaz izreka o indeksu: Toplotno jedro za Diracov operator*, 24. 4.,
 Joshua Greene, *(1,1) L-space knots*, 8. 5.,
 Brandon Owens, *A 2-dimensional approach to embedding 4-manifolds*, 8. 5.,
 Sašo Strle, *Izrek o indeksu: Asimptotični razvoj toplotnega jedra*, 1. del, 22. 5.,
 Sašo Strle, *Izrek o indeksu: Asimptotični razvoj toplotnega jedra*, 2. del, 29. 5.,
 Sašo Strle, *Izrek o indeksu: Asimptotični razvoj toplotnega jedra*, 3. del, 5. 6.,
 Marinko Timotijević, *Tiling methods with Gröbner basis*, 25. 9.,
 Žiga Virk, *Enorazsežna intrinzična vztrajnost*, 1. del, 2. 10.,
 Dejan Govc, *Nekaj primerov distančnih filtracij*, 9. 10.,
 Žiga Virk, *Enorazsežna intrinzična vztrajnost*, 2. del, 16. 10.,
 Petar Pavešić, *Minimalne triangulacije in dobra pokritja*, 1. del, 23. 10.,
 Rade Živaljević, *Combinatorics and topology of the Cyclohedron*, 6. 11.,
 Žiga Virk, *Enorazsežna intrinzična vztrajnost*, 3. del, 13. 11.,
 Daniel Ruberman, *Configurations of embedded spheres*, 18. 11.,
 Petar Pavešić, *Minimalne triangulacije in dobra pokritja*, 2. del, 20. 11.,
 Petar Pavešić, *Minimalne triangulacije in dobra pokritja*, 3. del, 27. 11.,
 Aleš Vavpetič, *Homologija Liejevih algeber*, 1. del, 4. 12.,
 Žiga Virk, *Enorazsežna intrinzična vztrajnost*, 4. del, 11. 12.,
 Aleš Vavpetič, *Homologija Liejevih algeber*, 2. del, 18. 12.

Seminar IMFM in FNM v Mariboru iz topologije

Seminar vodita Iztok Banič in Uroš Milutinović. V letu 2017 je v okviru Seminarja bilo opravljenih 8 dveurnih predavanj. V povprečju je bilo na vsakem seminarju 6 udeležencev.

Obvestila so na spletni strani:

<https://omr.fnm.um.si/index.php/category/seminar-iz-topologije/>.

Iztok Banič, *Komponente inverznih limit*, 6. 2. (2),

Matej Merhar, *Minimalni kontinuumi in njihova uporaba v teoriji posplošenih inverznih limit*, 8. 5. (2),

- Iztok Banič**, *Anderson–Choquetov kontinuum*, 1. del, 15. 5. (2),
Iztok Banič, *Anderson–Choquetov kontinuum*, 2. del, 22. 5. (2),
Paul Gartside, *Graph-like Continua: Characterizations and Eulerian Loops*, 29. 5. (2),
Iztok Banič, *Lastnost fiksne točke posplošenih inverznih limit*, 1. del, 6. 11. (2),
Iztok Banič, *Lastnost fiksne točke posplošenih inverznih limit*, 2. del, 13. 11. (2),
Iztok Banič, *Lastnost fiksne točke posplošenih inverznih limit*, 3. del, 27. 11. (2).

Mednarodni topološki seminar Ljubljana–Maribor–Zagreb

Vodje seminarja so Sonja Štimac (Sveučilište u Zagrebu, Prirodoslovno-matematički fakultet), Iztok Banič (Univerza v Mariboru, Fakulteta za naravoslovje in matematiko) in Petar Pavešić (Univerza v Ljubljani, Fakulteta za matematiko in fiziko). V letu 2017 je imel 4 sestanke. V povprečju je bilo na seminarju 20 udeležencev.

Informacije o delu seminarja so na <https://omr.fnm.um.si/index.php/category/topoloski-seminar-lj-mb-zg/>.

Zagreb

Dejan Govc, *Aproximative Nerve Theorem*, 28. 1.,

Iztok Banič, *The closed subset theorem for inverse limits*, 28. 1.

Maribor

Dejan Govc, *Unimodal category*, 22. 4.,

Sonja Štimac, *Lozi-like maps*, 22. 4.

Ljubljana

Henk Bruin, *Matching for generalized β -transformations*, 3. 6.,

Iztok Banič, *The (weak) full projection property for inverse limits with upper semicontinuous bonding functions*, 3. 6.

Zagreb

Petar Pavešić, *Minimal triangulations of manifolds with non-free fundamental group*, 16. 12.,

Maja Resman, *Classifications of diffeomorphisms and epsilon-neighborhoods*, 16. 12.

ODDELEK ZA FIZIKO

PROJEKTI

V letu 2017 smo člani oddelka delovali v okviru raziskovalnega programa

Zvonko Jagličić, *Nove slikovno-analitske metode*, (P2-0348).

Sodelovali smo tudi v okviru infrastrukturnega programa

Vojko Jazbinšek, *Infrastrukturna dejavnost pri IMFM*, (I0-0002).

Sodelovali smo v dveh domačih projektih:

J2-8194, *Zvonko Jagličić*, Senzorske tehnologije pri kontroli posegov v objekte kulturne dediščine,

J1-7032, *Janez Dolinšek*, Visokoentropijske kovinske spojine.

In v treh mednarodnih projektih:

Zvonko Jagličić, *Magnetno-strukturne korelacije v arzenatih dvovalentnih prehodnih elementov*, BI-AT/16-17-005 (dvostranski z Avstrijo),

Zvonko Jagličić, *Uporaba magnetnih nanodelcev za termično spominsko celico*, BI-RS/16-17-026 (dvostranski z Srbijo),

Zvonko Jagličić, *Magnetizem večjedrnih molekul z atomi prehodnih kovin*, BI-CN/17-18-004 (dvostranski s Kitajsko).

VODENJE RAZISKOVALNEGA CENTRA

Zvonko Jagličić, *Center za magnetna merjenja CMag*, ki združuje raziskovalce iz več ustanov: FMF, FFA, FKKT, KI, IJS in IMFM.

BIBLIOGRAFIJE RAZISKOVALCEV

Patricia Cotič Smole:

C1. — , C. Kaiser, J. Krammer, N. V. Ruiten, T. Hopp, *A comparison of biomechanical models for MRI to digital breast tomosynthesis 3D re-*

- gistration*, Computational Biomechanics for Medicine XII : a MICCAI 2017 Workshop, Quebec City, Kanada, september 2017, Workshop proceedings, 102–112.
- C2. T. Hopp, — , N .V. Ruiter, *Automated multimodal breast CAD based on registration of MRI and two view mammography*, 3rd International Workshop, DLMIA 2017 and 7th International Workshop, ML-CDS 2017 Held in Conjunction with MICCAI 2017, Quebec City, Kanada, september 2017, Deep Learning in Medical Image Analysis and Multimodal Learning for Clinical Decision Support (Lecture Notes in Computer Science, 10553), 365–372.
- C3. — , N. V. Ruiter, N. Duric, T. Hopp, *Challenges and Applications of Registering 3D Ultrasound Computer Tomography with Conventional Breast Imaging Techniques*, International Workshop on Medical Ultrasound Tomography, Speyer, Nemčija, november 2017, Conference Proceedings, 253–262.
- C4. T. Hopp, — , N. V. Ruiter, *Comparison of registration strategies for USCT-MRI image fusion: preliminary results*, International Workshop on Medical Ultrasound Tomography, Speyer, Nemčija, november 2017, Conference Proceedings, 361–368.
- G1. *A comparison of biomechanical models for MRI to digital breast tomosynthesis 3D registration*, Computational Biomechanics for Medicine XII : a MICCAI 2017 Workshop, Quebec City, Kanada, september 2017.
- G2. *Challenges and Applications of Registering 3D Ultrasound Computer Tomography with Conventional Breast Imaging Techniques*, International Workshop on Medical Ultrasound Tomography, Speyer, Nemčija, november 2017.

Rok Hren:

- F1. *Cost-effectiveness of opioid treatment in Republic of South Africa*, vabljeno predavanje, Adcock Ingram Critical Care Opioid Substitution Therapy (OST) Mini-Symposium, Johannesburg, Republika Južna Afrika, januar 2017.
- F2. *A review of value-based pricing of oncological drugs*, vabljeno predavanje, 7th Adriatic Congress of Pharmacoeconomics and Outcomes Research, Poreč, Hrvaška, april 2017.
- F3. *Can interventions for improved adherence impact cost effectiveness of biological treatment?*, vabljeno predavanje, 7th Adriatic Congress of

- Pharmacoeconomics and Outcomes Research, Poreč, Hrvaška, april 2017.
- F4. *New perspectives on pharmaceutical economics and policies*, vabljen predavanje, 1st Conference on Medical Laboratory Accreditation and Quality Systems: European Answers, Beograd, Srbija, april 2017.
- F5. *Vpliv adherence na stroškovno učinkovitost zdravljenja*, vabljen predavanje, VI. osteološki dnevi, Maribor, oktober 2017.
- F6. *Challenges in market access and pricing of oncological drugs*, vabljen predavanje, 11th IME-META National Health Economics Training and Conference, Pecs, Madžarska, oktober 2017.
- F7. *Desired outcomes & cost implications of detox vs maintenance treatment of opioid addiction: how we can achieve more for less?*, vabljen predavanje, 19th ISAM Annual Conference "Addiction Medicine: New Frontier", Abu Dhabi, Združeni arabski emirati, oktober 2017.
- F8. *Pharmacoeconomic perspective on detoxification and maintenance treatment*, vabljen predavanje, 19th ISAM Annual Conference "Addiction Medicine: New Frontier", Abu Dhabi, Združeni arabski emirati, oktober 2017.
- F9. *Cost-effectiveness and financial impact analysis of apremilast in the treatment of psoriasis (PsO) in Slovenia*, vabljen predavanje, Celgene CEE Dermatology Expert Meeting, Zagreb, Hrvaška, november 2017.
- G1. *Impact of low adherence on cost-effectiveness of the biological treatment of psoriasis (PsO) and psoriatic arthritis (PsA)*, ISPOR 20th Annual European Congress, Glasgow, Škotska, november 2017.
- G2. *Cost-effectiveness analysis of opioid substitution treatment in Republic of South Africa*, ISPOR 20th Annual European Congress, Glasgow, Škotska, november 2017.
- G3. *Cost-effectiveness comparison of opioid substitution therapy vs. non-pharmacologic therapy in the State of Kuwait*, ISPOR 20th Annual European Congress, Glasgow, Škotska, november 2017.
- H1. —, M. Milanič, *Lahko izboljšana adherence vpliva na stroškovno učinkovitost zdravljenja z biološkimi zdravili?*, *Medicina danes* **9** (2017), št. 6-7, 14–15.
- I1. Predavatelj na ISPOR Short Course Program "Risk-Sharing/Performance-Based Arrangements in Central & Eastern Europe: Implementation of Managed Entry Agreements", izpeljan na ISPOR 20th Annual European Congress, Glasgow, Škotska, november 2017.
- I2. Predsednik, ISPOR (International Society for Pharmacoeconomics and

Outcomes Research) Slovenia Regional Chapter.

13. Član, ISPOR Central & Eastern Europe (CEE) Consortium Research Committee.
14. Član, ISPOR HSPC Science and Research Committee.

Zvonko Jagličič:

- C1. K. Breznik, B. Dojer, A. Pevec, — , M. Kristl, *Nikljev(II) kompleks z 2-aminobenzotiazolom - strukturne, termične in magnetne lastnosti = Nickel(II) complex with 2-aminobenzothiazole - structural, thermal and magnetic properties*, Slovenski kemijski dnevi, Portorož, september 2017, Zbornik referatov in povzetkov, 6 str.
- C2. M. Klanjšek, A. Zorko, R. Žitko, J. Mravlje, — , P. Kumar Biswas, P. Prelovšek, D. Mihailović, D. Arčon, *A high-temperature quantum spin liquid with polaron spins*, Nature Phys. **13** (2017), 1130–1134.
- C3. B. Dojer, A. Pevec, — , M. Kristl, *Cobalt(II) complexes with hydroxypyridines and halogenides*, J. Mol. Struct. **1128** (2017), 724–729.
- C4. J. Buh, A. Mrzel, A. Kovič, V. Kabanov, — , S. Vrtnik, P. Koželj, D. Mihailović, *Phase slip and telegraph noise in δ – MoN nanowires*, Phys., C Supercond. **535** (2017), 24–29.
- C5. E. Safaei , N. Naghdi, — , A. Pevec, Y.-I. Lee, *Synthesis and characterization of an iron(III) complex of an ethylenediamine derivative of an aminophenol ligand in relevance to catechol dioxygenase active site*, Polyhedron **122** (2017), 116–123.
- C6. T. Gilewski, J. Gawraczyński, M. Derzsi, — , Z. Mazej, P. Polczyński, R. Jurczakowski, P. J. Leszczyński, W. Grochala, *[Ag(OH₂)₂][Ag(SO₄)₂] : a hydrate of a silver(II) salt*, Chemistry **23** (2017), 1805–1813.
- C7. — , Z. Mazej, *Antiferromagnetic CsCrF₅ and canted antiferromagnetism in RbCrF₅ and KCrF₅*, J. Magn. Magn. Mater. **434** (2017), 112–117.
- C8. Z. Mazej, T. Gilewski, E. A. Goreshnik, — , M. Derzsi, W. Grochala, *Canted antiferromagnetism in two-dimensional silver(II) Bis[pentafluoridooxidotungstate(VI)]*, Inorg. Chem. **56** (2017), str.
- C9. Z. Mazej, E. A. Goreshnik, — , Y. Filinchuk, N. Tumanov, L. G. Akse-lrud, *Photochemical synthesis and characterization of xenon(VI) hexafluoridomanganates(IV)*, Eur. J. Inorg. Chem. **2017** (2017), 2130–2137.
- C10. M. Mihalik, M. Mihalik, — , R. Vilarinho, J. Moreira, *Magnetic phase diagram of the TbMn_{1-x}Fe_xO₃ solid solution system*, Phys., B Condens. Matter **506** (2017), 163–167.

- C11. S. Pršič, S. M. Savić, Z. Branković, — , S. Vrtnik, G. Branković, *Anti-ferromagnetism and heat capacity of $\text{NaCo}_{2-x}\text{Cu}_x\text{O}_4$ ceramics*, Ceram. Int. **43** (2017), 2022–2026.
- C12. E. Safaei, H. Bahrami, A. Pevec, B. Kozlevčar, — , *Copper(II) complex of new non-innocent O-aminophenol-based ligand as biomimetic model for galactose oxidase enzyme in aerobic oxidation of alcohols*, J. Mol. Struct. **1133** (2017), 526–533.
- C13. E. Safei, H. Bahrami, A. Wojtczak, S. Alavi, — , *Redox potential tuning by redox-inactive anions in copper(II) complexes of non-innocent o-aminophenol-based ligand containing benzoxazole : learning from nature*, Polyhedron **122** (2017), 219–227.
- C14. M. Wencka, S. Vrtnik, P. Koželj, — , P. Gille, J. Dolinšek, *Anisotropic electrical, thermal and magnetic properties of $\text{Al}_{13}\text{Ru}_4$ decagonal quasicrystalline approximant*, Z. Kristallogr., Cryst. Mater. **232** (2017), 647–652.
- C15. L. Radovanović, J. Rogan, D. Poleti, M. V. Rodić, — , *A terephthalate-bridged two-dimensional heteronuclear Cu(II)–Mn(II) complex with a terminal 2,2'-dipyridylamine ligand*, J. Serb. Chem. Soc **82** (2017), 1247–1258.
- F1. *Magnetic properties of selected manganite perovskites*, vabljeno predavanje, Politehnika Wroclawska, Wroclav, Poljska, februar 2017.
- F2. *Magnetism of manganite perovskites*, vabljeno predavanje, 1st Solid-State Science & Research Meeting, Zagreb, Hrvaška, junij 2017.
- G1. *Magnetostructural correlations of selected divalent transition metal arsenates : an update*, 25th Slovenian-Croatian Crystallographic Meeting, Ljubljana, junij 2017.
- II. Mentor pri eni diplomski in eni zaključni nalogi.

Marko Jagodič:

- C1. Y.-W. Li, L.-Y. Guo, H.-F. Su, — , M. Luo, X.-Q. Zhou, S.-Y. Zeng, C.-H. Tung, D. Sun, L.-S. Zheng, *Two unprecedented POM-based inorganic-organic hybrids with concomitant heteropolytungstate and molybdate*, Inorg. Chem. **56** (2017), 2481–2489.
- C2. S. Gyergyek, D. Makovec, — , M. Drogenik, K. Schenk, O. Jordan, J. Kovač, G. Dražič, H. Hofmann, *Hydrothermal growth of iron oxide NPs with a uniform size distribution for magnetically induced hyperthermia : structural, colloidal and magnetic properties*, Alloys Compd.

694 (2017), 261-271.

- II. Prejemnik priznanja DMFA Slovenije za uspešno uvajanje nadarjenih srednješolcev v raziskovalno delo na področju fizike.

Vojko Jazbinšek:

- C1. — , J. Pirnat, Z. Trontelj, Z. Lavrič, S. Srčič, *Zaznava polimorfizma z jedrsko kvadrupolno resonanco*, 26. Mednarodna elektrotehniška in računalniška konferenca, Portorož, september 2017, Zbornik ERK 2017, 349–352.
- C2. S. Beguš, J. Pirnat, — , Z. Trontelj, *Optical detection of low frequency NQR signals : a step forward from conventional NQR*, J. Phys., D, Appl. Phys. **50** (2017), 1–10.
- G1. *Detection of polymorphism using ^{14}N NQR spectroscopy*, 1st Solid-State Science & Research Meeting, Zagreb, Hrvaška, junij 2017.
- G2. *Zaznava polimorfizma z jedrsko kvadrupolno resonanco*, 26. Mednarodna elektrotehniška in računalniška konferenca, Portorož, september 2017.
- G3. *Zaznava polimorfizma v farmacevtskih izdelkih z jedrsko kvadrupolno resonanco ^{14}N* , 4. Dneva biofizike 2017, Rogla, oktober 2017.

Janez Pirnat:

- C1. V. Jazbinšek, — , Z. Trontelj, Z. Lavrič, S. Srčič, *Zaznava polimorfizma z jedrsko kvadrupolno resonanco*, 26. Mednarodna elektrotehniška in računalniška konferenca, Portorož, september 2017, Zbornik ERK 2017, 349–352.
- C2. S. Beguš, — , V. Jazbinšek, Z. Trontelj, *Optical detection of low frequency NQR signals : a step forward from conventional NQR*, J. Phys., D, Appl. Phys. **50** (2017), 1–10.

Zvonko Trontelj:

- C1. V. Jazbinšek, J. Pirnat, — , Z. Lavrič, S. Srčič, *Zaznava polimorfizma z jedrsko kvadrupolno resonanco*, 26. Mednarodna elektrotehniška in računalniška konferenca, Portorož, september 2017, Zbornik ERK 2017, 349–352.

- C2. S. Beguš, J. Pirnat, V. Jazbinšek, — , *Optical detection of low frequency NQR signals : a step forward from conventional NQR*, J. Phys., D, Appl. Phys. **50** (2017), 1–10.
- G1. *Optically pumped magnetometer : in radiofrequency (RF), spectroscopy and in electrophysiologic measurements*, 1st Solid-State Science & Research Meeting, Zagreb, Hrvaška, junij 2017.
- G2. *Želje in stvarnost v eksperimentalni fiziki : zgledi iz magnetizma*, 16. simpozij fizikov Univerze v Mariboru, Maribor, december 2017.

TUJI GOSTI

Oddelek za fiziko je v letu 2017 gostil naslednje tuje goste:

Tamara Đorđević, 10 dni, Universität Wien, Dunaj, Avstrija, maj, avgust 2017, na povabilo Zvonka Jagličića,

Marija Perović, 7 dni, Institut za nuklearne nauke “Vinča”, Beograd, Srbija, avgust/september 2017, na povabilo Zvonka Jagličića,

Vojislav Spasojević, 7 dni, Institut za nuklearne nauke “Vinča”, Beograd, Srbija, avgust/september 2017, na povabilo Zvonka Jagličića,

Marko Bošković, 3 tedne, Institut za nuklearne nauke “Vinča”, Beograd, Srbija, avgust/september 2017, na povabilo Zvonka Jagličića.

GOSTOVANJA

Člani oddelka za fiziko so bili v letu 2017 na naslednjih gostovanjih:

Zvonko Jagličić, 11 dni, Universität Wien, Dunaj, Avstrija, februar 2017,
Zvonko Jagličić, 9 dni, Universität Wien, Dunaj, Avstrija, julij/avgust 2017,

Zvonko Jagličić, 9 dni, Institut za nuklearne nauke “Vinča”, Beograd, Srbija, september 2017.

SEMINARJI

Sodelavci Oddelka za fiziko sodelujejo na seminarjih, ki potekajo na Oddelku za fiziko FMF in na Oddelkih za fiziko in biofiziko Inštituta “Jožef Stefan”.

ODDELEK ZA TEORETIČNO RAČUNALNIŠTVO

PROJEKTI

V letu 2017 smo člani oddelka delovali v okviru programske skupine:

Tomaž Pisanski, *Računsko intenzivne metode v teoretičnem računalništvu, diskretni matematiki, kombinatorični optimizaciji ter numerični analizi in algebrī z uporabo v naravoslovju in družboslovju*, (P1-0294).

Začeli smo z novim projektom:

J7-8279, *Žiberna Aleš*, Bločno modeliranje večnivojskih in časovnih omrežij.

MLADI RAZISKOVALCI

V okviru oddelka se je v letu 2017 usposabljal mladi raziskovalec:

Toledo Roy Micael Alexi, mentor P. Potočnik.

BIBLIOGRAFIJE RAZISKOVALCEV

Nino Bašić:

C1. — , D. Bokal, T. Boothby, J. Rus, *An algebraic approach to enumerating non-equivalent double traces in graphs*, MATCH Commun. Math. Comput. Chem. **78** (2017), 581–594.

C2. — , G. Brinkmann, P. W. Fowler, T. Pisanski, N. Van Cleemput, *Sizes of pentagonal clusters in fullerenes*, J. Math. Chem. **55** (2017), 1669–1682.

D1. Tehnični urednik revije *Ars Mathematica Contemporanea*.

- D2. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.
- G1. *Theoretical background for stable polyhedral self-assembly*, Bioorigami - designed bionanostructures from nucleic acids to proteins and beyond, Ljubljana, junij 2017.

Vladimir Batagelj:

- A1. *Python Packages for Networks*, poglavje v *Encyclopedia of Social Network Analysis and Mining*, str. 1–10, Springer, New York, ZDA, 2017.
- A2. M. Cerinšek, — , *Semirings and Matrix Analysis of Networks*, poglavje v *Encyclopedia of Social Network Analysis and Mining*, str. 1–8, Springer, New York, ZDA, 2017.
- A3. M. Cerinšek, — , *Sources of Network Data*, poglavje v *Encyclopedia of Social Network Analysis and Mining*, str. 1–9, Springer, New York, ZDA, 2017.
- A4. — , A. Mrvar, *Pajek and PajekXXL*, poglavje v *Encyclopedia of Social Network Analysis and Mining*, str. 1–13, Springer, New York, ZDA, 2017.
- C1. — , A. Ferligoj, F. Squazzoni, *The emergence of a field : a network analysis of research on peer review*, *Scientometrics* **113** (2017), 503–532.
- D1. Član uredniškega odbora revije *Informatica*.
- D2. Član uredniškega odbora revije *Journal of Social Structure*.
- D3. Član uredniškega odbora revije *Metodološki zvezki / Advances in Methodology and Statistics*.
- D4. Član uredniškega odbora revije *Social Network Analysis and Mining*.
- D5. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D6. Član uredniškega odbora revije *The Art of Discrete and Applied Mathematics*.
- D7. Sourednik zbornika 6th *Workshop on Symbolic Data Analysis*, Ljubljana, junij 2017.
- E1. Član organizacijskega odbora konference *Srečanju raziskovalcev s področja analize omrežij*, Ljubljana, januar 2017.
- E2. Član mednarodnega programskega odbora konference *ARS'17 - International Workshop Challenges in Social network research*, Neapelj, Italija, maj 2017.
- E3. Član mednarodnega programskega odbora konference 6th *Workshop on Symbolic Data Analysis*, Ljubljana, junij 2017.

- E4. Član mednarodnega programskega odbora konference *14th International Conference on Applied Statistics*, Ribno, september 2017.
- E5. Priprava spletne strani konference *22nd Young Statisticians Meeting*, Zagreb, Hrvaška, oktober 2017.

- F1. *Approaches to analysis of large networks*, vabljeno predavanje, Graph-based Representations In Pattern Recognition, Anacapri, Italija, maj 2017.
- F2. *Derived networks and multi-mode network analysis*, vabljeno predavanje, ARS'17 - International Workshop Challenges in Social network research, Neapelj, Italija, maj 2017.

- G1. *Analysis of Peer Review data from WoS; part 4: an approach to temporal analysis*, COST/PEERE meeting, Vilna, Litva, marec 2017.
- G2. *Analysis of temporal networks (delavnica, 3 ure)*, 37th Sunbelt Social Networks Conference of the International Network for Social Network Analysis (INSNA), Peking, Kitajska, maj 2017.
- G3. *Network Analysis of Literature on Network Clustering from WoS*, 37th Sunbelt Social Networks Conference of the International Network for Social Network Analysis (INSNA), Peking, Kitajska, maj 2017.
- G4. *Clustering of symbolic data with relational constraint : demographic sex-age structures in US and Europe*, 6th Workshop on Symbolic Data Analysis, Ljubljana, junij 2017.
- G5. *Symbolic network analysis of bike sharing systems*, 6th Workshop on Symbolic Data Analysis, Ljubljana, junij 2017.
- G6. *Clustering network data: methods and applications (one week course)*, 7th International Summer School "Theory and Methods of Network Analysis" (TMSA-2017), Moskva, Rusija, junij 2017.
- G7. *Symbolic networks and big data*, COST/CRoNoS meeting, Amsterdam, Nizozemska, avgust/september 2017.
- G8. *Describing network evolution using probabilistic inductive classes*, COSTNET17 conference, Palma de Mallorca, Španija, oktober 2017.

- I1. Exploratory Data Analysis. Tečaj na Master's programme "Applied Statistics with Network Analysis", NRU Higher School of Economics, Moskva, Rusija, november 2017.
- I2. Social Network Analysis with R. Tečaj na Master's programme "Applied Statistics with Network Analysis", NRU Higher School of Economics, Moskva, Rusija, november 2017.
- I3. Priprava in vzdrževanje spletne strani CostNet wiki.

Andrej Bauer:

- C1. — , J. Gross, P. LeFanu Lumsdaine, M. Shulman, M. Sozeau, B. Spitters, *The HoTT library: a formalization of homotopy type theory in Coq*, Certified Programs and Proofs (CPP 2017), Pariz, Francija, januar 2017, Conference Proceedings, 164-172.
- C2. *Five stages of accepting constructive mathematics*, Bull. Amer. Math. Soc. (N.S.) **54** (2017), 481-498.
- D1. Sourednik zbornika *Continuity, Computability, Constructivity: From Logic to Algorithms*, Ljubljana, september 2017.
- E1. Organizacija konference *33rd Conference on the Mathematical Foundations of Programming Semantics*, Ljubljana, junij 2017.
- E2. Orgaizacija konference *7th Conference on Algebra and Coalgebra in Computer Science*, Ljubljana, junij 2017.
- G1. *A modular formalization of type theory in Coq*, 23rd International Conference on Types for Proofs and Programs (TYPES 2017), Budimpešta, Madžarska, maj 2017.

Matevž Bren:

- A1. G. Cankar, — , D. Zupanc, *Za večjo pravičnost šolskega sistema v Sloveniji : (analize povezav dosežkov učenk in učencev s socialnimi, kulturnimi, ekonomskimi in regionalnimi značilnostmi učenk in učencev, pridobljenimi prek podatkov Statističnega urada RS)*, Državni izpitni center, Ljubljana, 2017.
- B1. J. Fedran, B. Dobovšek, B. Ažman, — , *Integrity plan: a useful measure for curbing corruption at national and local level*, sprejeto v objavo v Lex localis.
- B2. P. Pungartnik, — , P. Umek, *The impact of sanctions on views held by and behaviour of motor vehicle drivers in Slovenia*, sprejeto v objavo v Revija za kriminalistiko in kriminologijo.
- G1. *Poznavanje dela zasebnih varnostnikov in zadovoljstvo z njihovim delom med prebivalci Ljubljane*, 18. slovenski dnevi varstvoslovja, Maribor, junij 2017.
- G2. *Vpliv kazni na spreminjanje stališč in vedenj udeležencev cestnega prometa v Sloveniji*, 18. slovenski dnevi varstvoslovja, Maribor, junij 2017.

- G3. *Vrstniško nasilje na šolskih hodnikih gimnazijskih in poklicnih programov - glavne ugotovitve*, 18. slovenski dnevi varstvoslovja, Maribor, junij 2017.
- G4. *Microwave effects on model aqueous solutions*, 29th MC² conference, Dubrovnik, Hrvaška, junij 2017.
- G5. *Ten years of students' e-evaluation at the University of Maribor, Challenges and Opportunities of Quality in the 4th Industrial Revolution*, Kobenhaven, Danska, avgust 2017.
- G6. *Acquaintance and satisfaction with the work of private security guards among the residents of Ljubljana*, 17th Annual Conference of the European Society of Criminology, Cardiff, Velika Britanija, september 2017.

Boris Horvat:

- B1. R. Kovačič Lukman, M. Cerinšek, P. Virtič, — , *Improving efficient resource usage and reducing carbon dioxide emissions by optimizing fleet management for winter services*, sprejeto v objavo v J. Clean. Prod.
- D1. Tehnični urednik revije *Ars Mathematica Contemporanea*.
- D2. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.
- D2. Tehnični urednik digitalne enciklopedije naravne in kulturne dediščine na Slovenskem *DEDI*, <http://www.dedi.si>
- D3. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>
- G1. *Digitalna transformacija GoOpti - slovenskega ponudnika prevozov na zahtevo*, 22. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2017.
- G2. *Pilotni projekt postavitve IT platforme na področju gozdno lesne verige v Sloveniji*, WOOD-TECH-TALKS, Kočevje, oktober 2017.
- G3. *Razprava, Posvet in okrogla miza - "Izzivi v lesarstvu"*, Ljubljana, november 2017.
- H1. — , P. Lukšič, M. Novak, M. Guček, *Digitalna transformacija GoOpti - slovenskega ponudnika prevozov na zahtevo*, 22. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2017, OTS 2017 : zbornik dvaindvajsete konference, 1–11.

Gašper Jaklič:

- B1. — , J. Kozak, *On parametric polynomial circle approximation*, sprejeto v objavo v Numer. Algorithms.
- C1. *Hermite parametric surface interpolation based on Argyris element*, Comput. Aided Geom. Design **56** (2017), 67–81.
- F1. *Parametric polynomial circle approximation*, vabljen predavanje, 10th NFN seminar, Strobl, Avstrija, april 2017.
- I1. Mentorstvo pri eni doktordki diseraciji in enem delu diplomskega seminarja.
- I2. 13 recenzij za MatSciNet.

Matjaž Konvalinka:

- B1. S. C. Billey, — , T. K. Peterson, W. Slofstra, B. Tenner, *Parabolic double cosets in Coxeter groups*, sprejeto v objavo v Electron. J. Combin.
- C1. S. C. Billey, — , F. A. Matsen, *On the enumeration of tanglegrams and tangled chains*, J. Combin. Theory Ser. A **146** (2017), 239–263.
- C2. R. E. Behrend, I. Fischer, — , *Diagonally and antidiagonally symmetric alternating sign matrices of odd order*, Adv. Math. **315** (2017), 324–365.
- H1. *O tangensu, vsotah potenc, Eulerjevih in Bernoullijevih številih*, Obzornik Mat. Fiz. **64** (2017), št. 4, 121–135.

Simona Korenjak-Černe:

- B1. M. Balas Rant, — , *How to successfully internationalize SMEs from the CEE Region : the role of strategies of differentiation and education*, sprejeto v objavo v J. Manag. Bus. Adm. Cent. Eur.
- C1. A. Lotrič Dolinar, J. Sambt, — , *Mortality by causes of death in European countries*, 20th international multiconference Information Society (IS2017), Ljubljana, oktober 2017, Conference Proceedings, Vol. F, 56–59.
- C2. M. Balas Rant, — , *Becoming a hidden champion : from selective use of customer intimacy and product leadership to business attractiveness*, South East Eur. J. Econ. Bus. **12** (2017), 89–103.

- D1. Sourednica zbornika 6th *International Workshop Symbolic Data Analysis*, Ljubljana, junij 2017.
- E1. Članica organizacijskega odbora konference 6th *Workshop on Symbolic Data Analysis*, Ljubljana, junij 2017.
- F1. *Clustering units with modal variables motivated by Open Data*, vabljeno predavanje, Science des Données : Nouvelles Données et Classes, Pariz, Francija, januar 2017.
- G1. *Advantages of symbolic data analysis approach in official statistics*, 1st International conference on official statistics ICOS 2017, Sarajevo, Bosna in Hercegovina, marec 2017.
- G2. *Clustering European countries regarding causes of death*, 6th Workshop on Symbolic Data Analysis, Ljubljana, junij 2017.
- G3. *Clustering of symbolic data with relational constraint : demographic sex-age structures in US and Europe*, 6th Workshop on Symbolic Data Analysis, Ljubljana, junij 2017.
- G4. *Studying European countries with clustering based on causes of death*, 14th International Conference on Applied Statistics, Ribno, september 2017.
- G5. *Mortality by causes of death in European countries*, 20th international multiconference Information Society (IS2017), Ljubljana, oktober 2017.
- I1. Somentorstvo pri študentskem raziskovalnem projektu.

Jurij Kovič:

- C1. *Classification of convex polyhedra by their rotational orbit Euler characteristic*, *Ars Math. Contemp.* **13** (2017), 23–30.
- D1. Tehnični urednik revije *Ars Mathematica Contemporanea*.
- D2. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.
- G1. *The Sierpiński product of graphs*, 2nd Malta Conference in Graph Theory and Combinatorics, Qawra, Malta, junij 2017.
- H1. *Gottfried Wilhelm Leibniz (1646-1716)–življenje in delo*, *Obzornik Mat. Fiz.* **64** (2017), št. 6, 233-239.
- I1. 2 recenziji za MathSciNet.
- I2. 2 opisa knjig za *Obzornik za matematiko in fiziko*.
- I3. En poljudni članek za revijo *Presek*.

Primož Luksič:

- D1. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>
- G1. *Digitalna transformacija GoOpti - slovenskega ponudnika prevozov na zahtevo*, 22. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2017.
- H1. B. Horvat, P. Lukšič, M. Novak, M. Guček, *Digitalna transformacija GoOpti - slovenskega ponudnika prevozov na zahtevo*, 22. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2017, OTS 2017 : zbornik dvaindvajsete konference, 1–11.

Alen Orbanić:

- D1. Tehnični urednik revije *Ars Mathematica Contemporanea*.
- D2. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.
- D2. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>
- I1. Mentorstvo pri enem magistrskem delu.
- I2. Prejemnik zlatega in srebrnega priznanja “Gospodarske zbornice Slovenije”.

Marko Petkovšek:

- C1. — , L. Vukšič, *Boolean functions and symbolic computation*, 2nd International Conference “Computer Algebra”, Moskva, Rusija, oktober/november 2017, Computer Algebra : International Conference Materials, 30–37.
- D1. Član uredniškega odbora revije *Advances in Applied Mathematics*.
- D2. Član uredniškega odbora revije *Annals of Combinatorics*.
- D3. Član uredniškega odbora revije *Journal of Symbolic Computation*.
- D4. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D5. Član uredniškega odbora revije *The Art of Discrete and Applied Mathematics*.
- E1. Član programskega odbora konference 2nd International Conference “Computer Algebra”, Moskva, Rusija, oktober/november 2017.

- F1. *Convolutions as solutions of linear recurrences*, vabljeno predavanje, Workshop on “Computer Algebra in Combinatorics”, Dunaj, Avstrija, november 2017.

Tomaž Pisanski:

- C1. N. Bašić, G. Brinkmann, P. W. Fowler, — , N. Van Cleemput, *Sizes of pentagonal clusters in fullerenes*, J. Math. Chem. **55** (2017), 1669–1682.
- C2. S. Bonvicini, — , *A novel characterization of cubic Hamiltonian graphs via the associated quartic graphs*, Ars Math. Contemp. **12** (2017), 1–24.
- C3. M. . E. Conder, — , A. Žitnik, E., PISANSKI, Tomaž, ŽITNIK, Arjana. *Vertex-transitive graphs and their arc-types*, Ars Math. Contemp. **12** (2017), 383–413.
- C4. A. Ljubetič, F. Lapenta, H. Gradišar, I. Drobnak, J. Aupič, Ž. Strmšek, D. Lainšček, I. Hafner Bratkovič, A. Majerle, N. Krivec, M. Benčina, — , T. Čirković-Veličković, A. Round, J. M. Carazo, R. Melero, R. Jerala, *Design of coiled-coil protein-origami cages that self-assemble in vitro and in vivo*, Nat. Biotechnol. **35** (2017), 1094–1101.
- D1. Glavni in odgovorni urednik revije *Ars Mathematica Contemporanea*.
- D2. Ustanovni in glavni urednik revije *The Art of Discrete and Applied Mathematics*.
- D3. Član uredniškega sveta revije *Logika & razvedrilna matematika*.
- D3. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>
- G1. *CoCoPOD : a coiled-coil protein origami design platform*, Bioorigami - designed bionanostructures from nucleic acids to proteins and beyond, Ljubljana, junij 2017.
- G2. *Design of molecular bioorigami : new modular protein structures and folding pathways*, Bioorigami - designed bionanostructures from nucleic acids to proteins and beyond, Ljubljana, junij 2017.
- G3. *Theoretical background for stable polyhedral self-assembly*, Bioorigami - designed bionanostructures from nucleic acids to proteins and beyond, Ljubljana, junij 2017.
- G4. *The Sierpiński product of graphs*, 2nd Malta Conference in Graph Theory and Combinatorics , Qawra, Malta, junij 2017.
- G5. *Coiled-coil protein origami cages (capable of in vivo self-assembly)*, 6th Mini Simpozij “Advances in structural biology”, Ljubljana, oktober 2017.

Bor Plestenjak:

- B1. A. Buckley, — , *Simple determinantal representations of up to quintic bivariate polynomials*, sprejeto v objavo v Linear Multilinear Algebra.
- C1. A. Boralevi, J. Doornmalen, J. Draisma, M. E. Hochstenbach, — , *Uniform determinantal representations*, SIAM J. Appl. Algebra Geom. **1** (2017), 415–441.
- C2. *Minimal determinantal representations of bivariate polynomials*, Linear Algebra Appl. **532** (2017), 550–569.
- G1. *Minimal determinantal representations of bivariate polynomials*, 8th Linear Algebra Workshop, Ljubljana, junij 2017.
- G2. *Subspace methods for multiparameter eigenvalue problems with applications to separable boundary value problems*, Householder Symposium XX on Numerical Linear Algebra, Blacksburg, ZDA, junij 2017.
- G3. *Minimal determinantal representations of bivariate polynomials*, INdAM Meeting “Structured Matrices in Numerical Linear Algebra: Analysis, Algorithms and Application”, Cortona, Italija, september 2017.

Primož Potočnik:

- B1. B. Kuzman, A. Malnič, — , *On vertex- and edge-transitive graphs over doubled cycles*, sprejeto v objavo v J. Combin. Theory Ser. B.
- C1. — , P. Šparl, *On the radius and the attachment number of tetravalent half-arc-transitive graphs*, Discrete Math. **340** (2017), 2967–2971.
- C2. — , P. Spiga, G. Verret, *Asymptotic enumeration of vertex-transitive graphs of fixed valency*, J. Combin. Theory Ser. B **122** (2017), 221–240.
- C3. — , S. Wilson, *The separated box product of two digraphs*, European J. Combin. **62** (2017), 35–49.
- C4. — , R. Požar, *Smallest tetravalent half-arc-transitive graphs with the vertex-stabiliser isomorphic to the dihedral group of order 8*, J. Combin. Theory Ser. A **145** (2017), 172–183.
- D1. Urednik revije *Ars Mathematica Contemporanea*.
- D2. Urednik revije *The Art of Discrete and Applied Mathematics*.
- D3. Gostujoči urednik revije *Discrete Applied Mathematics*.
- D2. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>

Matija Pretnar:

- C1. Y. Forster, O. Kammar, S. Lindley, — , *On the expressive power of user-defined effects: effect handlers, monadic reflection, delimited control*, Proc. ACM Program. Lang. **1** (2017), art. e13, 29 str.
- C2. O. Kammar, — , *No value restriction is needed for algebraic effects and handlers*, J. Funct. Programming **27** (2017), art. e7, 34 str.
- E1. Organizacija konference *33rd Conference on the Mathematical Foundations of Programming Semantics*, Ljubljana, junij 2017.
- E2. Orgaizacija konference *7th Conference on Algebra and Coalgebra in Computer Science*, Ljubljana, junij 2017.
- G1. *Modelling the spread of bluetongue in Slovenia*, Modelling in Animal Health conference - ModAH 2017, Nantes, Francija, junij 2017.

Andrej Taranenko:

- C1. I. Banič, — , *Measuring closeness of graphs - the Hausdorff distance*, Bull. Malays. Math. Sci. Soc. **40** (2017), 75–95.
- C2. A. Kelenc, D. Kuziak, — , I. G. Yero, *Mixed metric dimension of graphs*, Appl. Math. Comput. **314** (2017), 429–438.
- G1. *Mixed metric dimension of graphs*, 2nd Malta Conference in Graph Theory and Combinatorics, Qawra, Malta, junij 2017.
- G2. *Mixed metric dimension of graphs*, 30th Ljubljana - Leoben Graph Theory Seminar, Maribor, september 2017.
- G3. *Mixed metric dimension of graphs*, 17th Workshop on Graph Theory: Colourings, Independence and Domination, Zielona Góra, Poljska, september 2017.
- H1. *Generiranje vseh podmnožic dane množice - leksikografska ureditev*, Presek **45** (2017/2018), št. 3, 26–28.

Arjana Žitnik:

- C1. M. D. E. Conder, T. Pisanski, — , *Vertex-transitive graphs and their arc-types*, Ars Math. Contemp. **12** (2017), 383–413.
- D1. Tehnična urednica revije *Ars Mathematica Contemporanea*.
- D2. Tehnična urednica revije *The Art of Discrete and Applied Mathematics*.

F1. *Vertex-transitive graphs and their arc-types*, vabljeno predavanje, University of Wisconsin–Madison, ZDA, september 2017.

TUJI GOSTI

Oddelek za teoretično računalništvo je v letu 2017 gostil naslednje tuje goste:

Michiel Hochstenbach, 3 tedne, Technische Universiteit Eindhoven, Nizozemska, april/maj 2017, na povabilo Bora Plestenjaka,

Mehrdad Maleki, 1 mesec, Institute for research in fundamental sciences, Teheran, Iran, februar 2017, na povabilo Andreja Bauerja,

Emre Mengi, 6 dni, Koç Üniversitesi, Carigrad, Turčija, september 2017, na povabilo Bora Plestenjaka,

Fredrik Nordvall Forsberg, 1 teden, University of Strathclyde, Glasgow, Velika Britanija, november 2017, na povabilo Andreja Bauerja,

Sewon Park, 1 mesec, Korea Advanced Institute for Science and Technology, Daejeon, Južna Koreja, oktober 2017, na povabilo Andreja Bauerja,

Håkon Robbestad Gylderud, 1 teden, University of Stockholm, Stockholm, Švedska, januar 2017, na povabilo Andreja Bauerja.

GOSTOVANJA

Člani oddelka za teoretično računalništvo so bili v letu 2017 na naslednjih raziskovalnih obiskih oziroma študijskih izpopolnjevanjih v tujini:

Marko Boben, 4 mesece, University of Toronto, Kanada, september/december 2017,

Gašper Jaklič, 3 mesece, Johannes Kepler Universität Linz, Avstrija, maj/junij 2017,

Marko Petkovšek, 6 dni, Erwin Schrödinger Institute, Dunaj, Avstrija, oktober 2017,

Marko Petkovšek, 9 dni, Dorodnicyn Computing Center, Federal Research Center "Computer Science and Control", Russian Academy of Sciences, Moskva, Rusija, oktober/november 2017,

Marko Petkovšek, 13 dni, Erwin Schrödinger Institute, Dunaj, Avstrija, november 2017,

Arjana Žitnik, 8 dni, University of Wisconsin-Madison, ZDA, september 2017.

SEMINARJI

Seminar za diskretno matematiko

V okviru seminarja za diskretno matematiko – vodja seminarja je Primož Potočnik, tajnica seminarja pa Arjana Žitnik – predstavljamo raziskovalne dosežke na področju diskretne matematike in teoretičnega računalništva.

Spletna stran seminarja je na naslovu:

http://wiki.fmf.uni-lj.si/wiki/Seminar_za_diskretno_matematiko.

Seminar se sestaja ob torkih od 10. do 12. ure. V letu 2017 se je zvrstilo 29 sestankov, na katerih je bilo v povprečju po 11 poslušalcev.

Tatiana Romina Hartinger, *New characterizations in structural graph theory: 1-perfectly orientable graphs, graph products, and the price of connectivity*, 3. 1. 2017,

Sergio Cabello, *Subquadratic algorithms for the diameter and the sum of pairwise distances in planar graphs*, 10. 1. 2017,

Barbara Ikica, *On several extremal problems in chemical graph theory*, 17. 1.,

Jean Paul Zerafa, *Fractional colourings and fractional covers of a graph*, 7. 2.,

Daniel Pellicer, *Chiral 4-polytopes in space*, 7. 3.,

Tomaž Pisanski, *On generalized Petersen graphs that are Kronecker covers*, 14. 3.,

Janoš Vidali, *Cubic girth-regular graphs of small girth*, 21. 3.,

Susan Margulies, *Hilbert's Nullstellensatz and Linear Algebra: An Algorithm for Determining Combinatorial Infeasibility*, 28. 3.,

Jurij Kovič, *Integrali na grafih*, 4. 4.,

Antonio Montero, *Cubic toroids with few orbits*, 11. 4.,

Gašper Fijavž, *K_7 minors in 6-regular toroidal graphs*, 18. 4.,

Nataša Pržulj, *Data-driven medicine*, 25. 4.,

Tilen Marc, *Topes graphs of complexes of oriented matroids*, 9. 5.,

Bojan Mohar, *The crossing number of the cone of the graph*, 16. 5.,

Bojan Mohar, *Paths and trails of odd length and totally odd immersions of graphs*, 23. 5.,

Mike Henning, *Total Domination in Graphs and Transversals in Hypergraphs*, 30. 5.,

Janko Gravner, *Growth dynamics on Hamming graphs*, 6. 6.,

Micael Toledo, *Maniflexes and the 2-orbit problem*, 13. 6.,

- Tomaž Pisanski**, *Spremembe*, 3. 10.,
Tomaž Pisanski, *Hamilton surface decomposition - 60 Years Later*, 10. 10.,
David Pokrajac, *Recursive partitioning simulation of breast tissue*, 17. 10.,
Sergio Cabello, *The inverse Voronoi problem*, 24. 10.,
Karin Cvetko Vah, *Nekomutativne mreže*, 1. del, 7. 11.,
Tomaž Pisanski, *Nekomutativne mreže*, 2. del, 14. 11.,
Jurij Kovič, *Grafi praporov, simetrije in parametrizacija konfiguracij*, 21. 11.,
Vesna Iršič, *Strong geodetic number of complete bipartite graphs and of graphs with specified diameter*, 28. 11.,
Vesna Iršič, *Strong geodetic problem on Cartesian products of graphs*, 5. 12.,
Marko Petkovšek, *Definite sums as solutions of linear recurrences*, 12. 12.,
Tomaž Pisanski, *Antilattices, their substructures, congruences and automorphisms*, 19. 12.

Seminar za osnove matematike in teoretičnega računalništva

Seminar sta vodila Andrej Bauer in Alex Simpson. Obiskovalo ga je 10 do 15 članov. Podatki o seminarju so na: <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-osnove/>.

- Håkon Robbestad Gylterud**, *Iterative multisets and sets in homotopy type theory*, 9. 1.,
Davorin Lešnik, *Theory of cuts*, 1. del, 13. 2.,
Mehrdad Maleki, *Differentiation in logical form*, 20. 2.,
Davorin Lešnik, *Theory of cuts*, 2. del, 27. 2.,
Davorin Lešnik, *Theory of cuts*, 3. del, 7. 3.,
Andrej Bauer, *HoTT HITs*, 10. 4.,
Niels Voorneveld and Aliaume Lopez, *Effectful applicative bisimilarity*, 18. 4.,
Tom Schrijvers, *Quantified class constraints*, 18. 9.,
Philipp Haselwarter, *Extensional type theories for proof assistants*, 2. 10.,
Andrej Bauer, *Fixed-point theorems in synthetic computability*, 1. del, 10. 10.,

- Andrej Bauer**, *Fixed-point theorems in synthetic computability*, 2. del, 17. 10.,
- Sewon Park**, *Formal verification in imperative multivalued programming over continuous data types*, 23. 10.,
- David Ellerman**, *New foundations for information theory*, 1. 11.,
- Francesco Gavazzo**, *An abstract account to behavioural equivalences and metrics for higher-order effectful language*, 1. del, 6. 11.,
- Francesco Gavazzo**, *An abstract account to behavioural equivalences and metrics for higher-order effectful language*, 2. del, 13. 11.,
- Fredrik Nordvall Forsberg**, *Alternative coding systems for inductive-recursive definitions*, 17. 11.,
- Andrej Bauer**, *Command-like expressions for real infinite-precision calculations*, 4. 12.,
- Martina Seidl**, *Proof systems for practical QBF reasoning*, 12. 12.

Sredin seminar

Seminar za računalniško matematiko je začel svoje delo leta 1971 in poskuša s svojimi temami spremljati dogajanje na področju diskretne matematike ter računalništva doma in po svetu. Vodja seminarja je Vladimir Batagelj.

Seminar ima svojo spletno stran na naslovu

<http://vladowiki.fmf.uni-lj.si/doku.php?id=vlado:pub:sreda>.

Seminar se sestaja ob sredah ob 18. uri.

V letu 2017 so se zvrstila naslednja predavanja (1272–1279):

- Daria Maltseva**, *Network Research in Russia: overview of the ANR-Lab and some studies of the scientific field*, 15. 3.,
- Vladimir Batagelj**, *Analiza bibliografskih omrežij z WoS; dela o razvuščanju in bločnem modeliranju omrežij*, 22. 3.,
- Vladimir Batagelj**, *Deležni pristop k izpeljanim omrežjem*, 29. 3.,
- Vladimir Batagelj**, *Sklopljenost in sosklicnost v analizi omrežij sklicevanj*, 19. 4.,
- Dalibor Fiala**, *Retrieving Data from Bibliographic Databases*, 12. 7.,
- Daria Maltseva**, *Network analysis of biographical interviews with Soviet and Russian Sociologists*, 4. 10.,
- Vladimir Batagelj**, *Priprava Unicodskih bibliografskih podatkov v R-ju*, 11. 10.,
- Marjan Cugmas**, *Center-periferija kohezivni tip bločnega modela*, 1. del, 13. 12..

Seminar za zgodovino matematičnih znanosti

Seminar, ki ga vodi Jurij Kovič, se je v koledarskem letu 2017 sestal 26-krat. Potekal je ob ponedeljkih med 14. in 16. uro, rednih članov je bilo 8, udeleževalo se ga je od 6 do 20 poslušalcev, v povprečju 9.

Dogajanje na seminarju, to je naslove, predavatelje, datume in kraj izvedbe lahko spremljate na spletni strani http://wiki.fmf.uni-lj.si/wiki/Seminar_za_zgodovino_matematinih_znanosti.

Obravnavali smo naslednje teme iz zgodovine svetovne in slovenske matematike:

Aleksander Simonič, *Riemannova funkcija zeta: praštevila*, 2. del, 9. 1.,
Marko Razpet, *Thomas Clausen — od pastirja do astronoma in matematika*, 16. 1.,

Milan Hladnik, *Arhimedova metoda ravnovesja in težišče likov*, 23. 1.,

Nada Razpet, *John Milnor in njegovi sodobniki*, 20. 2.,

Aleksander Simonič, *Riemannova funkcija zeta: praštevila 2*, 3. del, 27. 2.,

Milan Hladnik, *Arhimedova plavajoča telesa*, 6. 3.,

Jurij Kovič, *Gottfried Wilhelm Leibniz (1646-1716) – življenje, delo in matematični sopotniki: v Newtonovi sencí*, 2. del, 13. 3.,

Mitja Rosina; Andrej Čadež, *Nikolaj Kuzanski; Simetrije, prostor-čas in črne luknje*, 20. 3.,

Darko Mulej, *Teorija kaosa od Newtona do Mandelbrota*, 27. 3.,

Aleksander Simonič, *Riemannova funkcija zeta: spodleteli poskusi*, 4. del, 3. 4.,

Jurij Kovič, *Joseph-Louis Lagrange (1736-1813) — življenje in delo*, 10. 4.,

Marko Razpet, *Oscar Zariski — od Kobrína do Harvarda*, 24. 4.,

Milan Hladnik, *Ustanovitev ljubljanske univerze*, 8. 5.,

Nada Razpet, *Franz van Schooten mlajši*, 15. 5.,

Anton Suhadolc, Izidor Hafner, Marko in Nada Razpet, *Ob petdesetletnici smrti prof. Josipa Plemlja*, 22. 5.,

Marko in Nada Razpet, *Osnutek gradiva o desetiskih predponah in reševanje izbranih nalog z GeoGebro*, 29. 5.,

Milena Strnad, *Srinavasa Ramanujan (22. 12. 1887 - 26. 4. 1920) – življenje in delo matematika, ki je poznal neskončnost. Ob 130.letnici rojstva*, 1. del, 9. 10.,

Milena Strnad, *Srinavasa Ramanujan*, 2. del, 16. 10.,

Aleksander Simonič, *Ramanujanove beleške*, 23. 10.,

- Vito Lampret**, *Natančni približki posplošenih harmoničnih števil*, 6. 11.,
Darko Mulej, *Hermann Grassmann (1809-1877)*, 13. 11.,
Aleksander Simonič; Mitja Rosina, *Grassmann in mnogoterosti; Nekaj izrekov o enoličnosti in rekonstrukciji gostote matrik višjega reda*, 20. 11.,
Aleksander Simonič, *Ponceletov izrek*, 27. 11.,
Milena Strnad, *Srinavasa Ramanujan (22. 12. 1887 - 26. 4. 1920) — življenje in delo matematika, ki je poznal neskončnost. Ob 130.letnici rojstva*, 3. del, 4. 12.,
Milena Strnad, *Srinavasa Ramanujan (22.12.1887-26.4.1920) – življenje in delo matematika, ki je poznal neskončnost. Ob 130.letnici rojstva*, 4. del, 11. 12.,
Milena Strnad, *Srinavasa Ramanujan*, 5. del, 18. 12.

MATEMATIČNI KOLOKVIJI

Matematični kolokviji in Javna predavanja DMFA na Fakulteti za matematiko in fiziko Univerze v Ljubljani so praviloma ob četrtnih ob 18:15 v predavalnici 2.02 na Jadranski 21 v Ljubljani.

Napovedi kolokvijev in arhiv s povzetki so na voljo na spletnem naslovu:
<http://wiki.fmf.uni-lj.si/wiki/MatematicniKolokviji>

V letu 2017 so se zvrstila naslednja predavanja:

13. marec 2017

Gašper Fijavž

Univerza v Ljubljani, Slovenija

GRAFI. MINORJI, PLOSKVE, ALGORITMI

31. marec 2017

Cédric Villani

l'institut Henri-Poincaré, Paris in L'université Claude-Bernard-Lyon-I,
Francija

NAJBOLJŠA IN NAJHUJŠA NAPAKA HENRIJA POINCARÉJA

20. april 2017

Igor Klep

Univerza v Ljubljani, Slovenija in University of Auckland, Nova Zelandija

NEENAKOSTI

11. maj 2017

László Lempert

Purdue University, ZDA

THE COHOMOLOGICAL METHOD IN COMPLEX ANALYSIS

31. avgust 2017

Thomas Kailath

Stanford University, ZDA

FROM RADIATIVE TRANSFER THEORY TO FAST ALGORITHMS FOR CELL
PHONES

26. oktober 2017

Matija Cencelj

Univerza v Ljubljani, Slovenija

KORALE IN NJIHOVE FUNDAMENTALNE GRUPE

MATEMATIČNA KNJIŽNICA

Z BIBLIOGRAFSKIM ODDELKOM

V letu 2017 je v knjižnico tekoče prihajalo 122 naslovov matematičnih revij, od tega smo v zameno prejeli zvezke iz 26 naslovov in kot dar 11 naslovov. Na ta način smo pridobili 235 enot.

Pri knjigah smo pridobili 390 novih naslovov (od tega 6 doktoratov, 45 magisterijev in 89 diplomskih del oz. nalog ter zaključnih del študentov 1. stopnje Bolonjskega študija). Skupaj smo pridobili 310 knjižnih enot (89 iz nakupa, 162 kot dar, ostalo so obvezni izvodi).

Stanje 31. 12. 2017 je bilo naslednje: 60.288 knjižnih enot (36.850 knjig, 3.188 diplom, magisterijev in disertacij ter 20.250 letnikov revij) in 769 enot neknjižnega gradiva (rokopisna in slikovna gradiva, stari mikrofisi, računalniško gradivo in drobni tisk).

V letu 2017 smo zaposlenim in študentom na Univerzi v Ljubljani omogočili elektronski dostop do revij, ki jih naša knjižnica naroča. V okviru konzorcijev, v katerih sodelujejo fakultete Univerze v Ljubljani z drugimi slovenskimi univerzami, pa je bil omogočen še elektronski dostop do dodatnih revij v bazah *SpringerLink*, *ScienceDirect*, *Wiley Interscience* in *Taylor & Francis*. Poleg tega je bil mogoč tudi dostop do starih člankov, predvsem ameriških znanstvenih revij, v arhivu *JSTOR*.

V letu 2017 smo v sistem COBISS vnesli 308 zapisov monografij in zbornikov, 946 bibliografskih zapisov člankov in recenzij, ter 153 zapisov izvedenih del. Vso literaturo, ki jo hranimo v knjižnici lahko najdete preko sistema COBISS/OPAC.

V letu 2017 je imela naša knjižnica približno 1.000 aktivnih članov. Obiskov v knjižnici je bilo 6.277, preko sistema COBISS/OPAC pa še 9.030. Za potrebe izposoje smo opravili 15.381 transakcij. Med obiskovalci knjižnice je še vedno največ študentov, predvsem tistih, ki študirajo na naši fakulteti. Preko medknjižnične izposoje smo preko CTK v glavnem iz tujine naročili 6 dokumentov. Iz drugih knjižnic pa je k nam prišlo 39 zahtevkov za fotokopije člankov oz. izposoje knjig, ki jih hranimo v Matematični knjižnici.

V letu 2017 so konzorcij za nakup matematične baze podatkov *MathSciNet* (<http://www.ams.org/mathscinet/>) sestavljale tri slovenske univerze,

za Univerzo v Ljubljani Matematična knjižnica, za Univerzo na Primorskem Knjižnica za tehniko, medicino in naravoslovje in Univerza v Novi Gorici. Poleg te baze podatkov lahko za pregledovanje matematične literature uporabljate tudi bazo podatkov *Zentralblatt MATH* (<http://www.zentralblatt-math.org/zmath/en/>). Podatke o citiranosti (*Web of Science*) najdete na naslovu <http://apps.webofknowledge.com/>. Faktorje vpliva za posamezne revije lahko najdete v COBISS/OPAC (katalog ali specializirane baze podatkov). Kot že nekaj let, smo tudi v letu 2017 v knjižnici pripravili tudi po abecedi oz. velikosti faktorja vpliva urejeno verzijo seznama revij s faktorjem vpliva 2016 za 17 kategorij.

Knjižnico financirata Oddelek za matematiko Fakultete za matematiko in fiziko ter Inštitut za matematiko, fiziko in mehaniko. Poleg tega pa del sredstev za nakup tujih znanstvenih revij prispeva tudi ARRS.

Knjižnica je odprta za študente od ponedeljka do petka od 7. do 15. ure, za vse člane IMFM in FMF pa 24 ur na dan, vse dni.

Maja Klavžar

ARS MATHEMATICA CONTEMPORANEA

Mednarodna matematična revija *Ars Mathematica Contemporanea* (AMC) je v letu 2017 objavila svoj 12. in 13. letnik v štirih številkah.

Skupaj je bilo v obeh letnikih objavljenih 61 člankov. Od tega je bilo 14 člankov slovenskih avtorjev oziroma soavtorjev.

Razširjeni uredniški odbor AMC sestavlja prek 70, večinoma tujih matematikov. Posebnost revije, ki zaenkrat še izhaja v papirnati obliki (ISSN 1855-3966), je tudi ta, da so vsi objavljeni članki v elektronski obliki (ISSN 1855-3966) prosto dostopni na svetovnem spletu.

Revijo indeksirajo naslednje baze podatkov: *Mathematical Reviews*, *Zentralblatt MATH*, *COBISS*, *SCOPUS*, *Science Citation Index-Expanded*, *Web of Science*, *ISI Alerting Service*, *Current Contents/Physical, Chemical & Earth Sciences*.

Vol. 12, No. 1 (2017)

Simona Bonvicini, Tomaž Pisanski, *A novel characterization of cubic Hamiltonian graphs via the associated quartic graphs*, str. 1-24,

Aleksandar Ilić, Marko Milošević, *The parameters of Fibonacci and Lucas cubes*, str. 25-29,

Dan Archdeacon, Drago Bokal, Tanja Golgranc, *A characterization of plane Gauss paragraphs*, str. 31-36,

Karin Cvetko-Vah, *On skew Heyting algebras*, str. 37-50,

Mihael Perman, *A decomposition for Markov processes at an independent exponential time*, str. 51-65,

Bill Allombert, Jean-Paul Simon Allouche, Michel Mendès France, *Euler's divergent series and an elementary model in Statistical Physics*, str. 67-76,

Aleksandra Gorzkowska, Rafał Kalinowski, Monika Pilśniak, *The distinguishing index of the Cartesian product of finite graphs*, str. 77-87,

Niranjan Balachandran, Sajith Padinhatteeri, $\chi_D(G)$, $|\text{Aut}(G)|$, and a variant of the Motion Lemma, str. 89-109,

Reza Sharafadini, Mitsugu Hirasaka, *Coherent configurations over copies of association schemes of prime order*, str. 111-126,

- Ehsan Estaji, Juan Alberto Rodríguez-Velázquez**, *The strong metric dimension of generalized Sierpiński graphs with pendant vertices*, str. 127-134,
- Yan Yang**, *Remarks on the thickness of $K_{n,n,n}$* , str. 135-144,
- Jin-Xin Zhou, Jin Ho Kwak, Yan-Quan Feng, Zhen-Lin Wu**, *Automorphism group of the balanced hypercube*, str. 145-154,
- Walter Klotz, Torsten Sander**, *Uniquely colorable Cayley graphs*, str. 155-165,
- Irena M. Jovanović**, *Non-negative spectrum of a digraph*, str. 167-182,
- Richard H. Hammack, Gregory D. Smith**, *Cycle bases of reduced powers of graphs*, str. 183-203.

Vol. 12, No. 2 (2017)

- Chris Godsil, Karen Meagher**, *An algebraic proof of the Erdős-Ko-Rado theorem for intersecting families of perfect matchings*, str. 205-217,
- Francesca Merola, Anita Pasotti, Marco Antonio Pellegrini**, *Cyclic and symmetric hamiltonian cycle systems of the complete multipartite graph: even number of parts*, str. 219-233,
- Susana Clara López, Francesc Antoni Muntaner-Batle**, *Distance labelings: a generalization of Langford sequences*, str. 235-245,
- Hanlin Chen, Renfang Wu, Guihua Huang, Hanyuan Deng**, *Independent sets on the Towers of Hanoi graphs*, str. 247-260,
- Damir Vukičević, Riste Škrekovski, Aleksandra Tepeh**, *Relative edge betweenness centrality*, str. 261-270,
- Mohammad Reza Oboudi**, *Characterization of graphs with exactly two non-negative eigenvalues*, str. 271-286,
- Richard M. Green, Metod Saniga**, *A classification of the Veldkamp lines of the near hexagon $L_3 \times GQ(2, 2)$* , str. 287-299,
- Dániel Gerbner, Balázs Keszegh, Dömötör Pálvolgyi, Günter Rote, Gábor Wiener**, *Search for the end of a path in the d -dimensional grid and in other graphs*, str. 301-314,
- Daniel Pellicer**, *A chiral 4-polytope in \mathbb{R}^3* , str. 315-327,
- Zhao Dong, Wenbo V. Li, Chunwei Song**, *Integral representations for binomial sums of chances of winning*, str. 329-336,
- Niko Tratnik, Petra Žigert Pleteršek**, *Saturation number of nanotubes*, str. 337-350,
- Mária Janicová, Tomáš Madaras, Roman Soták, Borut Lužar**, *From NMNR-coloring of hypergraphs to homogenous coloring of graphs*, str. 351-360,

Jehan A. Al-bar, Ahmad N. Al-kenani, Najat M. Muthana, Cheryl E. Praeger, *A normal quotient analysis for some families of oriented four-valent graphs*, str. 361-381,

Marston D. E. Conder, Tomaž Pisanski, Arjana Žitnik, *Vertex-transitive graphs and their arc-types*, str. 383-413,

Kris Coolsaet, *Spherical quadrangles with three equal sides and rational angles*, str. 415-424.

Vol. 13, No. 1 (2017)

Saori Adachi, Hiroshi Nozaki, *On the largest subsets avoiding the diameter of $(0, \pm 1)$ -vectors*, str. 1-13,

Izak Broere, Monika Pilśniak, *The distinguishing index of the Cartesian product of countable graphs*, str. 15-21,

Jurij Kovič, *Classification of convex polyhedra by their rotational orbit Euler characteristic*, str. 23-30,

Viktória E. Kaszanitzky, Bernd Schulze, *Lifting symmetric pictures to polyhedral scenes*, str. 31-47,

Long-Tu Yuan, Xiao-Dong Zhang, *On the Erdős-Sós Conjecture for graphs on $n = k + 4$ vertices*, str. 49-61,

Špela Jezernik Širca, Matjaž Omladič, *The JLS model with ARMA/GARCH errors*, str. 63-79,

Jeffrey H. Dinitz, Ian M. Wanless, *The existence of square integer Heffter arrays*, str. 81-93,

Marco Buratti, Gloria Rinaldi, Tommaso Traetta, *3-pyramidal Steiner triple systems*, str. 95-106,

Krzysztof Petelczyc, *On some generalization of the Möbius configuration*, str. 107-123,

Gašper Košmrlj, *Domination game on paths and cycles*, str. 125-136,

Carmen Amarra, Michael Giudici, Cheryl E. Praeger, *Affine primitive symmetric graphs of diameter two*, str. 137-165,

Kyle Bonetta-Martin, Thomas A. McCourt, *On which groups can arise as the canonical group of a spherical latin bitrade*, str. 167-185,

Andrew Beveridge, Yiqing Cai, *Pursuit-evasion in a two-dimensional domain*, str. 187-206,

Alfredo Donno, *Spectrum, distance spectrum, and Wiener index of wreath products of complete graphs*, str. 207-225,

Vladimir Grujić, *Counting faces of graphical zonotopes*, str. 227-234.

Vol. 13, No. 2 (2017)

Jan Goedgebeur, Carol T. Zamfirescu, *Improved bounds for hypohamiltonian graphs*, str. 235-257,

Monika Pilśniak, *Improving upper bounds for the distinguishing index*, str. 259-274,

David Bevan, Grahame Erskine, Robert Lewis, *Large circulant graphs of fixed diameter and arbitrary degree*, str. 275-291,

Boštjan Brešar, Bert L. Hartnell, Douglas F. Rall, *Uniformly dissociated graphs*, str. 293-306,

Yonah Cherniavsky, Avraham Goldstein, Vadim E. Levit, *Balanced Abelian group-valued functions on directed graphs*, str. 307-315,

Mirko Petruševski, Riste Škrekovski, *A note on acyclic number of planar graphs*, str. 317-322,

Ruben A. Hidalgo, Saul Quispe, *Regular dessins d'enfants with field of moduli $Q(\sqrt[3]{2})$* , str. 323-330,

Mitsugu Hirasaka, Kijung Kim, Semin Oh, *Association schemes all of whose symmetric fusion schemes are integral*, str. 331-341,

Yi Wang, Yan-Quan Feng, *Half-arc-transitive graphs of prime-cube order of small valencies*, str. 343-353,

Peter Hudák, Mária Maceková, Tomáš Madaras, Pavol Široczki, *More on the structure of plane graphs with prescribed degrees of vertices, faces, edges and dual edges*, str. 355-366,

Ana Simić, Milena Bogdanović, Jelisavka Milošević, *The binary locating-dominating number of some convex polytopes*, str. 367-377,

Patrick W. Fowler, Barry T. Pickup, Irene Sciriha, Martha Borg, *Spectra and structural polynomials of graphs of relevance to the theory of molecular conduction*, str. 379-408,

Jürgen Bokowski, Piotr Pokora, *On line and pseudoline configurations and ball-quotients*, str. 409-416,

Sylwia Cichacz, *On zero sum-partition of Abelian groups into three sets and group distance magic labeling*, str. 417-425,

Witold Jarnicki, Wendy Myrvold, Peter Saltzman, Stan Wagon, *Properties, proved and conjectured, of Keller, Mycielski, and queen graphs*, str. 427-460,

Dragan Marušič, *Semiregular automorphisms in vertex-transitive graphs with a solvable group of automorphisms*, str. 461-468.

ISSN 1318–539X