

INŠTITUT ZA MATEMATIKO, FIZIKO IN MEHANIKO



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INŠTITUT ZA MATEMATIKO, FIZIKO IN MEHANIKO

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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

Konec preteklega leta je bilo na Inštitutu za matematiko, fiziko in mehaniko zaposlenih 143 sodelavcev (128 doktorjev znanosti, dva magistra znanosti, 11 magistrrov ter dva z univerzitetno izobrazbo), od tega 32 redno ter 111 dopolnilno zaposlenih. Število sodelavcev se je, glede na preteklo leto, rahlo povečalo.

O številnih objavah naših sodelavcev v uglednih revijah, o prejetih nagradah in pohvalah ter nasploh o kvalitetnem ter odmevnem raziskovalnem delu govore strani poročila, ki so jih prispevali posamezni oddelki. Naj tu spomnim posebej: naš sodelavec prof. dr. Bojan Mohar je prejel lani dve prestižni priznanji. Bil je uvrščen v izbor SIAM Fellow 2018, za svoje delo na področju teorije grafov je dobil nagrado »John L. Synge«, ki jo podeljuje Royal Society of Canada.

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 je vrsto let vodil prof. dr. Tomaž Pisanski, z začetkom novega leta jo prevzema prof. dr. Primož Potočnik. Program na Oddelku za fiziko vodi prof. dr. Zvonko Jagličić. Na Oddelku za fiziko deluje tudi infrastrukturna skupina, ki jo vodi doc. dr. Vojko Jazbinšek.

V preteklem letu se je zaključilo pet projektov, ki jih je sofinancirala ARRS, od tega štirje na Oddelku za matematiko in en na Oddelku za fiziko. Vsi so bili temeljni projekti. Na Oddelek za matematiko so se zaključili: projekt z naslovom »Interakcija med kompleksno analizo, minimalnimi ploskvami in parcialnimi diferencialnimi enačbam«, vodja je bil prof. dr. Franc Forstnerič, projekt z naslovom »Raziskovanje notranje strukture stolpnih grafov«, vodja je bil prof. dr. Sandi Klavžar, projekt z naslovom »Kombinatorični problemi s poudarkom na igrah«, vodja je bil prav tako prof. dr. Sandi Klavžar, ter projekt z naslovom »Izbrani problemi nelinearne analize«, vodja je bil prof. dr. Dušan Repovš. Na Oddelku za fiziko pa se je zaključil projekt z naslovom »Visokoentropijske kovinske spojine«, vodja projekta je bil prof. dr. Janez Dolinšek; pri tem projektu je bil naš inštitut v vlogi sodelujoče organizacije.

Lani so začeli teči trije temeljni projekti, ki jih sofinancira ARRS, od tega dva na Oddelku za matematiko in en na Oddelku za teoretično računalništvo. Nova projekta na Oddelku za matematiko sta: projekt z naslovom »Analiza, geometrija in parcialne diferencialne enačbe«, vodja projekta je prof. dr. Franc Forstnerič, ter projekt z naslovom »Sodobne invariante grafov«, vodja projekta je prof. dr. Boštjan Brešar; pri tem projektu IMFM nastopa kot sodelujoča organizacija, projekt pa poteka na Fakulteti za naravoslovje in matematiko Univerze v Mariboru. Na Oddelku za teoretično računalništvo je nov projekt z naslovom »Aksijski grafi in tehnike krovnih grafov«, vodja projekta je prof. dr. Tomaž Pisanski; tudi pri tem projektu IMFM nastopa kot sodelujoča organizacija, projekt pa poteka na Inštitutu Andrej Marušič Univerze na Primorskem.

V skladu z Javnim pozivom za dodelitev mentorskih mest raziskovalnim programom v letu 2019 so novi mentorji mladim raziskovalcem postali: doc. dr. Vojko Jazbinšek (P2-0348), prof. dr. Marjetka Knez (P1-0288) ter prof. dr. Dušan Repovš (P1-0292). Na podlagi sklepa ARRS o prenosu mentorskega mesta s programske skupine P1-0188 s Fakultete za matematiko in fiziko Univerze v Ljubljani na programsko skupino P1-0222 na Inštitut za matematiko, fiziko in mehaniko je novi mentor postal tudi prof. dr. Igor Klep.

S 01. oktobrom 2018 so na našem inštitutu pričeli z usposabljanjem štirje novi mladi raziskovalci, trije na Oddelku za matematiko in eden na Oddelku za fiziko. Boštjan Lemež (mentor prof. dr. Dušan Repovš), Gregor Podlogar (mentorica prof. dr. Marjetka Knez) in Lara Vukšić (mentor prof. dr. Igor Klep) se usposabljaajo na Oddelku za Matematiko; vsi na področju »Matematika«. Na Oddelku za fiziko je z usposabljanjem pričel novi mladi raziskovalec Urban Marhl (mentor doc. dr. Vojko Jazbinšek); usposablja se na področju »Tehnološko usmerjena fizika«.

Konec leta 2018 se je na IMFM usposabljal 10 mladih raziskovalcev – osem na Oddelku za matematiko, eden na Oddelku za fiziko in eden na Oddelku za teoretično računalništvo. Njihovo usposabljanje v pretežni meri financira ARRS.

Preteklo leto je doktoriral en mladi raziskovalec, in sicer: dr. Tilen Marc (maja) 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 16 novimi dvostranskimi projekti, tako da jih je skupaj teklo kar 22. Geografsko je dvostransko sodelovanje IMFM povezano s skupinami raziskovalcev iz Avstrije, Črne Gore, Kitajske, Nemčije, Rusije, Srbije, Turčije in Združenih držav

Amerike.

Tudi v letu 2018 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 naslednje znanstvene dogodke: delavnico »Non-Commutative Structures 2018 (NCS2018)«, ki je od 23. do 27.05.2018 potekala v Portorožu, kot organizator delavnico »The 21st Korean Workshop in Computational Geometry«, ki je potekala od 16. do 21.06.2018 na Rogli, ter kot organizator konferenco »Stein manifolds and holomorphic mappings«, ki je od 17. do 21.09.2018 potekala na Fakulteti za matematiko in fiziko UL v Ljubljani.

Za zaključek še nekaj, kar bi najraje preskočil. Tudi v letu 2018 nam ni uspelo doseči kaj spodbudnega pri urejanju statusa osrednjega slovenskega matematičnega inštituta. Še več, ustanovitev osebne služnosti rabe na nepremičnini, s katero sta UL (skupaj z UL FMF) in inštitut želela trajno pravno urediti status naših prostorov, po mnenju pristojnega ministrstva ni sprejemljiva rešitev.

Jernej Kozak,
direktor IMFM

ODDELEK ZA MATEMATIKO

PROJEKTI

V letu 2018 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:

J1-7256, *Franc Forstnerič*, Interakcije med kompleksno analizo, minimalnimi ploskvami in parcialnimi diferencialnimi enačbami (projekt zaključen v letu 2018),

J1-7110, *Sandi Klavžar*, Raziskovanje notranje strukture stolpnih grafov (projekt zaključen v letu 2018),

N1-0043, *Sandi Klavžar*, Kombinatorični problemi s poudarkom na igrah (projekt zaključen v letu 2018),

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 ne-negativne matrične tri-faktorizacije,

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

J1-7025, *Dušan Repovš*, Izbrani problemi nelinearne analize (projekt zaključen v letu 2018),

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

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

Začeli smo z novimi projekti:

J1-9109, *Boštjan Brešar*, Sodobne invariante grafov,

J1-9104, *Franc Forstnerič*, Analiza, geometrija in parcialne diferencialne enačbe.

Sodelovali smo v naslednjih mednarodnih projektih:

Matic Cencelj, *Grobe geometrijske lastnosti in teorije mere* (slovensko–ameriški projekt),

Karin Cvetko Vah, *Nekomutativna analiza podatkov* (slovensko–srbski projekt),

David Dolžan, *Algebraične in kombinatorične metode in njihove aplikacije* (slovensko–avstrijski projekt),

Franc Forstnerič, *Kompleksna analiza in geometrija* (slovensko–nemški projekt),

Sandi Klavžar, *Igra dominacije na grafih in digrafih* (slovensko–kitajski projekt),

Sandi Klavžar, *Aktualne dominacijske invariante* (slovensko–ameriški projekt),

Igor Klep, *Nekomutativna realna algeraična geometrija in njena uporaba* (slovensko–ameriški projekt),

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

Janko Marovt, *Problemi ohranjevalcev z aplikacijami* (slovensko–ameriški projekt),

Giovanni Molica Bisci, *Končna asimptotična dimenzija in njene popložitve* (slovensko–ameriški 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, *Topološka in geometrijska struktura višjedimenzionalnih geodetskih prostorov* (slovensko–ameriški projekt),

Marko Slapar, *Interakcije med kvazikonformno in kompleksno analizo* (slovensko–črnogorski projekt),

Žiga Virk, *Analiza algebraskih struktur z diskretno Morseovo teorijo za simplicialne komplekse* (slovensko–črnogorski projekt),

Žiga Virk, *Vztrajnostni okvir za C^* algere* (slovensko–ameriški projekt),

Emil Žagar, *Modeliranje s krivuljami katerih hodograf je pitagorejski* (slovensko–ameriški projekt).

ORGANIZACIJA MEDNARODNIH KONFERENC

Od 23. 5. 2018 do 27. 5. 2018 je V portorožu potekala mednarodna delavnica “Non-commutative structures 2018 (NCS2018)”. Od 16. 6. 2018 do 21. 6. 2018 je na Rogli potekala mednarodna delavnica “The 21st Korean Workshop in Computational Geometry”. Od 17. 9. 2018 do 21. 9. 2018 je na Fakulteti za matematiko in fiziko UL potekala mednarodna konferenca “Stein manifolds and holomorphic mappings”. Inštitut za matematiko, fiziko in mehaniko (IMFM) je vse tri mednarodne dogodke finančno podprl.

MLADI RAZISKOVALCI

V okviru oddelka so se v letu 2018 usposabljali mladi raziskovalci:

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,
Boštjan Lemež, mentor D. Repovš,
Gregor Podlogar, mentor M. Knez,
Riccardo Ugolini, mentor F. Forstnerič,
Lara Vukšič, mentor I. Klep,

z doktoratom pa je zaključil svoje usposabljanje

Tilen Marc, mentor S. Klavžar.

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Jernej Azarija:

- C1. —, S. Klavžar, Y. Rho, S. Sim, *On domination-type invariants of Fibonacci cubes and hypercubes*, *Ars Math. Contemp.* **14** (2018), 387–395.
- C2. —, T. Marc, *There is no $(75, 32, 10, 16)$ strongly regular graph*, *Linear Algebra Appl.* **557** (2018), 62–83.

Iztok Banič:

- C1. — , M. Črepnjak, *Markov pairs, quasi Markov functions and inverse limits*, Houston J. Math. **44** (2018), 695–707.
- C2. — , M. Črepnjak, *Inverse component cropping sequences and connected inverse limits over intervals*, Glasnik Mat. **53** (2018), 371–384.
- C3. — , M. Črepnjak, M. Merhar, U. Milutinović, *The (weak) full projection property for inverse limits with upper semicontinuous bonding functions*, Mediterr. J. Math. **15** (2018), 1–21.
- D1. Član uredniškega odbora revije *Acta mathematica Spalatensia - Series didactica*.
- F1. *Extending bonding functions in generalized inverse sequences*, Predavanja na seminarju, Universität Wien, Dunaj, Avstrija, maj 2018.
- G1. *Formulacije matematičnih nalog in pričakovane rešitve*, 4. mednarodna konferenca o učenju in poučevanju matematike, Laško, Slovenija, junij 2018.
- I1. Mentorstvo pri enem magistrskem delu.

Dominik Benkovič:

- C1. — , M. Grašič, *Generalized skew derivations on triangular algebras determined by action on zero products*, Comm. Algebra **46** (2018), 1859–1867.
- C2. *Generalized Lie derivations of unital algebras with idempotents*, Oper. Matrices **12** (2018), 357–367.
- I1. 7 recenzij za MathSciNet.
- I2. Mentorstvo pri 2 magistrskih delih.

Janez Bernik:

- C1. — , K. Šivic, *On certain graded representations of filiform Lie algebras*, Linear Multilinear Algebra **66** (2018), 2305–2327.
- F1. *Quasi-filiform Lie algebras of maximum length revisited*, vabljeno predavanje, University of Waterloo, Kanada, maj 2018.
- I1. Mentorstvo pri 3 magistrskih delih in 2 delih diplomskega seminarja.

Luka Boc Thaler:

- E1. Član organizacijskega odbora konference *Stein manifolds and holomorphic mappings*, Ljubljana, september 2018.
- I1. Enoletno podoktorsko izpopolnjevanje na Università di Roma "Tor Vergata".
- I2. Somentorstvo pri enem magistrskem delu.

Drago Bokal:

- C1. M. Čampulová, J. Michálek, P. Mikuška, — , *Nonparametric algorithm for identification of outliers in environmental data*, J. Chemom. **32** (2018), e2997, 17 str.
- C2. — , Jesús Leaős, *Characterizing all graphs with 2-exceptional edges*, Ars Math. Contemp. **15** (2018), 383-406.
- C3. J. Nastran, B. Šircelj, — , M. Gams, *Sensitivity analysis of computational models that dissolve the Fermi paradox*, 21. mednarodna multikonferenca Informacijska družba - IS 2018, Ljubljana, oktober 2018, Zbornik 21. mednarodne multikonference Informacijska družba - IS 2018 : zvezek A, 21–24.
- G1. *Sensitivity analysis of computational models that dissolve the Fermi paradox*, 21. mednarodna multikonferenca Informacijska družba - IS 2018, Ljubljana, oktober 2018.
- I1. Mentorstvo pri 3 magistrskih nalogah.
- I2. Glavni urednik fakultetne revije *Dianoia*.
- I3. Pisec recenzij za revije: "Dianoia", "Discussiones Mathematicae. Graph Theory", "Electronic Journal of Combinatorics", "Discrete Applied Mathematics", "Journal of Graph Theory", "Discrete Mathematics".

Boštjan Brešar:

- C1. — , S. Klavžar, D. F. Rall, K. Wash, *Packing chromatic number versus chromatic and clique number*, Aequationes Math. **92** (2018), 497–513.
- C2. — , J. Ferme, *Packing coloring of Sierpiński-type graphs*, Aequationes Math. **92** (218), 1091–1118.
- C3. F. Bonomo, — , L. Grippo, M. Milanič, M. D. Safe, *Domination parameters with number 2 : interrelations and algorithmic consequences*, Discrete Appl. Math. **235** (2018), 23–50.

- C4. — , N. Movarraei, *On the number of maximal independent sets in minimum colorings of split graphs*, Discrete Appl. Math. **247** (2018), 352–356.
- C5. — , T. R. Hartinger, T. Kos, M. Milanič, *1-perfectly orientable K_4 -minor-free and outerplanar graphs*, Discrete Appl. Math. **248** (2018), 33–45.
- C6. — , J. Ferme, *An infinite family of subcubic graphs with unbounded packing chromatic number*, Discrete Math. **341** (2018), 2337–2342.
- C7. — , T. R. Hartinger, T. Kos, M. Milanič, *On total domination in the Cartesian product of graphs*, Discuss. Math. Graph Theory **38** (2018), 963–976.
- C8. — , T. Gologranc, T. Kos, *Convex and isometric domination of (weak) dominating pair graphs*, Theoret. Comput. Sci. **730** (2018), 32–43.
- D1. Področni urednik revije *Discrete Mathematics and Theoretical Computer Science*.
- D2. Član uredniškega odbora revije *Discussiones Mathematicae Graph Theory*.
- F1. *Stable marriage problem, generalized matchings, and wireless sensor networks*, vabljeno predavanje, International Workshop on Effective Techniques to Generate Genuine Interest in Mathematics, Salem, Indija, januar 2018.
- F2. *Dominating sequences and related graph invariants*, vabljeno predavanje, International Conference on Discrete Math. (ICDM - 2018), Salem, Indija, januar 2018.
- F3. *Grundy domination in graphs*, vabljeno predavanje, Veszprém Discrete Mathematics and Applications Conference, Veszprém, Madžarska, junij 2018.
- G1. *Packing chromatic number versus chromatic and clique number*, 8th Cracow Conference on Graph Theory “Rytró ’18”, Krakov, Poljska, september 2018.
- II. 8 recenzij za MathScieNet.
- II. Mentorstvo pri enem magistrskem delu.

Matej Brešar:

- B1. — , P. Šemrl, *Continuous commuting functions on matrix algebras*, sprejeto v objavo v Linear Algebra Appl.

- B2. — , P. Šemrl, *Zero product preserving maps on matrix rings over division rings*, sprejeto v objavo v *Contemp. Math.*
- C1. — , C. Hanselka, I. Klep, J. Volčič, *Skolem-Noether algebras*, *J. Algebra* **498** (2018), 294–314.
- C2. — , K. Zhao, *Biderivations and commuting linear maps on Lie algebras*, *J. Lie Theory* **28** (2018), 885–900.
- 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*.
- F1. *Functional identities and zero product determined algebras*, serija predavanj, Memorial University of Newfoundland, Atlantic Algebra Centre, St. John's, Kanada, september 2018.
- II. 2 recenziji za MathSciNet.
- I2. Somentorstvo pri enem magistrskem delu.
- I3. Avtor enega univerzitetnega učnega gradiva.

Sergio Cabello Justo:

- C1. *Subquadratic algorithms for the diameter and the sum of pairwise distances in planar graphs*, *ACM Trans. Algorithms* **15** (2018), 21 str.
- C2. — , L. Milinković, *Two optimization problems for unit disks*, *Comput. Geom.* **70-71** (2018), 1–12.
- C3. M. J. Bannister, — , D. Eppstein, *Parameterized complexity of 1-planarity*, *J. Graph Algorithms Appl.* **22** (2018), 23–49.
- C4. S. W. Bae, — , O. Cheong, Y. Choi, F. Stehn, S. D. Yoon, *The reverse Kakeya problem*, 4th International Symposium on Computational Geometry, Budimpešta, Madžarska, junij 2018, SoCG 2018, 13 str.
- D1. Član uredniškega odbora revije *Journal of Computational Geometry*.
- D2. Urednik revije *SIAM Journal on Discrete Mathematics*.
- D3. Gostujoči urednik revije *Computational Geometry*.
- E1. Član programskega odbora konference 45th *International Colloquium on Automata, Languages, and Programming (ICALP)*, Praga, Češka, julij 2018.
- F1. *Graph algorithms and computational geometry*, vabljeni predavanja, Intensive Research Program on Discrete, Combinatorial and Computational Geometry, Barcelona, Španija, april 2018.

- F2. *FPT in two and three dimensions*, vabljeno predavanje, Lorentz Center: Fixed Parameter Computational Geometry, Leiden, Nizozemska, maj 2018.
- F3. *Subquadratic Algorithms for the Diameter and the Sum of Pairwise Distances in Planar Graphs*, vabljeno predavanje, Highlights of Algorithms, Amsterdam, Nizozemska, junij 2018.
- F4. *FPT in two and three dimensions*, vabljeno predavanje, Interactions between geometry and graphs, Sevilja, Španija, junij 2018.
- F5. *The inverse Voronoi problem in graphs*, Mittagseminar, Freie Universität Berlin, Nemčija, oktober 2018.
- F6. *Interactions between geometry and graphs*, CSE Seminar series, Pohang University of Science and Technology (POSTECH), Pohang, Južna Koreja, oktober 2018.
- F7. *Interactions between geometry and graphs*, seminarsko predavanje, Ulsan National Institute of Science and Technology (UNIST), Ulsan, Južna Koreja, oktober 2018.
- F8. *Interactions between geometry, graphs and algorithms*, seminarsko predavanje, Université Paris-Est), Champs-sur-Marne, Francija, november 2018.
- F9. *Interactions between geometry, graphs and algorithms*, General Mathematics Seminar, Université du Luxembourg, Esch-sur-Alzette, Luksemburg, november 2018.
- II. Mentorstvo pri 2 delih diplomskega seminarja.

Kristijan Cafuta:

- B1. *Sums of Hermitian squares decomposition of non-commutative polynomials in non-symmetric variables using NCSOStools*, sprejeto v objavo v CEJOR Cent. Eur. J. Oper. Res.
- II. Soavtor enega univerzitetnega učnega gradiva.

Matija Cencelj:

- B1. J. Sun, L. Li, —, B. Gabrovšek, *Infinitely many sign-changing solutions for Kirchhoff type problems in \mathbb{R}^3* , sprejeto v objavo v Nonlinear Anal.
- C1. —, V. Rădulescu, D. Repovš, *Double phase problems with variable growth*, Nonlinear Anal. **177** (2018), 270–287.

C2. — , J. Dydak, A. Vavpetič, *Asymptotic dimension of coarse spaces via maps to simplicial complexes*, *Topology Appl.* **239** (2018), 226–233.

- I1. Mentorstvo pri 2 magistrskih delih.
- I2. Sorecenzent enega univerzitetnega učbenika.

Gregor Cigler:

B1. — , M. Jerman, P. J. Wojciechowski, *Full algebras of matrices*, sprejeto v objavo v *Linear Multilinear Algebra*.

G1. *Full subalgebras of matrices*, *Non-commutative structures: a workshop in honor of Jonathan Leech*, Portorož, maj 2018.

- I1. Recenzent enega univerzitetnega učbenika.

Jakob Cimprič:

B1. *A nullstellensatz for linear partial differential equations with polynomial coefficients*, sprejeto v objavo v *Multidimensional Syst. Signal Process.*

C1. *Local linear dependence of linear partial differential operators*, *Integral Equations Operator Theory* **90** (2018), art. 38, 8 str.

D1. Član uredniškega odbora revije *Journal of Algebra and Computational Applications*.

Karin Cvetko Vah:

B1. *Noncommutative frames*, sprejeto v objavo v *J. Algebra Appl.*

D1. Članica uredniškega odbora revije *Open Mathematics*.

D2. Sourednica zbornika *Non-commutative structures: a workshop in honor of Jonathan Leech*, Portorož, maj 2018.

F1. *Skew lattices in rings*, vabljen predavanje, Universiteit Antwerpen, Belgija, februar 2018.

G1. *Oriented faces of a polytope as a noncommutative lattice*, *Non-commutative structures: a workshop in honor of Jonathan Leech*, Portorož, maj 2018.

G2. *Isomorphisms and automorphisms of antilattices*, *Non-commutative structures: a workshop in honor of Jonathan Leech*, Portorož, maj 2018.

- I1. Ena recenzija za MathSciNet.
- I2. Avtorica enega univerzitetnega učnega gradiva.

Miran Černe:

- C1. *Nonlinear Riemann-Hilbert problems for quasilinear $\bar{\partial}$ -equations on the unit disc*, Complex Var. Elliptic Equ. **63** (2018), 278–291.
- E1. Član organizacijskega odbora konference *Stein Manifolds and Holomorphic Mappings*, Ljubljana, september 2018.
- I1. Urednik zbirke *Matematika-fizika*, področje *Matematika*, DMFA-založništvo.
- I2. Urednik zbirke *Izbrana poglavja iz matematike in računalništva*, DMFA-založništvo.
- I3. Mentorstvo pri 2 delih diplomskega seminarja.

Andrej Dobrovoljc:

- A1. *Proaktivno obvladovanje tveganj v informacijskih sistemih*, doktorska disertacija, Univerza v Ljubljani, Fakulteta za računalništvo in informatiko, Ljubljana, 2018.
- C1. *Odkrivanje potencialnih groženj za informacijski sistem*, RUO, Rev. Univ. Odl. **7** (2018), 334–346.

Gregor Dolinar:

- B1. —, A. È. Guterman, B. Kuzma, O. Markova, *Double centralizing theorem with respect to q -commutativity relation*, sprejeto v objavo v J. Algebra Appl.
- C1. —, B. Kuzma, N. Stopar, *Characterization of orthomaps on the Cayley plane*, Aequationes Math. **92** (2018), 243–265.
- C2. —, J. Marovt, *On a generalized concept of order relations on $B(H)$* , Math. Slovaca **68** (2018), 33–40.
- C3. —, B. Kuzma, J. Marovt, *A note on commutativity preserving maps on $M_n(\mathbb{R})$* , Oper. Matrices **12** (2018), 117–131.
- C4. —, A. Guterman, B. Kuzma, O. Markova, *Extremal generalized centralizers in matrix algebras*, Comm. Algebra **46** (2018), 3147–3154.

- D1. Član uredniškega odbora revije *Mathematica Slovaca*.
- F1. *Maximal doubly stochastic matrices*, vabljeno predavanje, Moskovskij gosudarstvennyj universitet imeni M. V. Lomonosova, Moskva, Rusija, februar 2018.
- F2. *Commutativity preservers and maximal doubly stochastic matrix centralizers*, vabljeno predavanje, Ankara University, Department of Mathematics, Ankara, Turčija, november 2018.
- G1. *Ustni izpit iz matematike na poklicni maturi = Oral mathematical exam in vocational matura*, 4. mednarodna konferenca o učenju in poučevanju matematike, Laško, junij 2018.

David Dolžan:

- B1. —, P. Oblak, *Cholesky decomposition of matrices over commutative semirings*, sprejeto v objavo v *Linear Multilinear Algebra*.
- C1. —, P. Oblak, *Bounds for the completely positive rank of a symmetric matrix over a tropical semiring*, *Electron. J. Linear Algebra* **34** (2018), 152–162.
- C2. —, D. Kokol Bukovšek, B. Kuzma, *On the lower bound for diameter of commuting graph of prime-square sized matrices*, *Filomat* **32** (2018), 5993–6000.
- II. Mentorstvo pri enem diplomskem delu.

Oliver Dragičević:

- B1. A. Carbonaro, —, *Bounded holomorphic functional calculus for non-symmetric Ornstein–Uhlenbeck operators*, sprejeto v objavo v *Ann. Sc. Norm. Super. Pisa Cl. Sci.* (5).
- F1. *On generalized convexity of power functions*, seminarsko predavanje, Cornell University, Ithaca, ZDA, april 2018.
- F2. *On generalized convexity of power functions*, seminarsko predavanje, University of California, Los Angeles, ZDA, april 2018.
- F3. *On generalized convexity of power functions*, seminarsko predavanje, Brown University, Providence, ZDA, april 2018.
- F4. *On generalized convexity of power functions*, seminarsko predavanje, University of Virginia, Charlottesville, ZDA, april 2018.

- F5. *Few examples related to generalized convexity of power functions*, vabljeno predavanje na konferenci, Probabilistic Aspects of Harmonic Analysis, Będlewo, Poljska, april/maj 2018.
- F6. *The p -ellipticity condition and applications*, vabljeno predavanje na sekciji iz harmonične analize, Joint Meeting of the Italian and Polish Mathematical Unions UMI-SIMAI-PTM, Wrocław, Poljska, maj 2018.
- F7. *On generalized convexity with respect to elliptic matrices*, seminarsko predavanje, Universität Wien, Dunaj, Avstrija, oktober 2018.

Barbara Drinovec Drnovšek:

- E1. Članica organizacijskega odbora konference *Stein Manifolds and Holomorphic Mappings*, Ljubljana, september 2018.
- F1. *On proper holomorphic discs*, vabljeno predavanje, Stein Manifolds and Holomorphic Mappings, Ljubljana, september 2018.
- F2. *Proper holomorphic curves attached to domains*, vabljeno predavanje, Mapping Problems and Complex Manifolds in Projective Spaces, Oslo, Norveška, december 2018.
- I1. Mentorstvo pri enem delu diplomskega seminarja.

Roman Drnovšek:

- B1. —, M. Kandić, *Positive operators as commutators of positive operators*, sprejeto v objavo v *Studia Math.*
- C1. *On order automorphisms of the effect algebra*, *Acta Sci. Math. (Szeged)* **84** (2018), 431–437.
- C2. *A sharp inequality involving hyperbolic and inverse hyperbolic functions*, *J. Inequal. Spec. Funct.* **9** (2018), 13–16.
- C3. *On algebras generated by positive operators*, *Positivity* **22** (2018), 815–828.
- C4. *A note on Huijsmans-de Pagter problem in ordered Banach algebras*, *Positivity* **22** (2018), 1355–1357.
- 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*, 6th Summer Workshop on Operator Theory, Krakov, Poljska, julij 2018.

II. 3 recenzije za MathSciNet.

Daniel Eremita:

C1. *Biderivations on tensor products of algebras*, Comm. Algebra **46** (2018), 1722-1726.

II. 3 recenzija za MathSciNet.

II. Mentorstvo pri enem magistrskem delu.

Gašper Fijavž:

F1. *K_7 -minors in embeddings*, vabljeno predavanje, 30th Workshop on Topological Graph Theory, Yokohama, Japonska, oktober 2018.

II. Mentorstvo pri enem magistrskem delu in enem diplomskem delu.

Franco Forstnerič:

B1. *A properly embedded holomorphic disc in the ball with finite area and dense boundary*, sprejeto v objavo v Math. Ann.

B2. A. Alarcón, —, *New complex analytic methods in the theory of minimal surfaces: a survey*, sprejeto v objavo v J. Aust. Math. Soc.

B3. *Mergelyan's and Arakelian's theorems for manifold-valued maps*, sprejeto v objavo v Mosc. Math. J.

B4. *Proper holomorphic immersions into Stein manifolds with the density property*, sprejeto v objavo v J. Anal. Math.

B5. A. Alarcón, —, F. J. López, *Every meromorphic function is the Gauss map of a conformal minimal surface*, sprejeto v objavo v J. Geom. Anal.

B6. 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.

B7. A. Alarcón, —, *Darboux charts around holomorphic Legendrian curves and applications*, sprejeto v objavo v Int. Math. Res. Not. IMRN.

B8. —, E. F. Wold, *Runge tubes in Stein manifolds with the density property*, sprejeto v objavo v Proc. Amer. Math. Soc.

B9. J. E. Fornæss, —, E. F. Wold, *Holomorphic approximation: the legacy of Weierstrass, Runge, Oka-Weil, and Mergelyan*, sprejeto poglavje za

objavo v knjigi *Advancements in Complex Analysis*, Springer, Cham, Švica.

- C1. A. Alarcón, — , *Every conformal minimal surface in \mathbb{R}^3 is isotopic to the real part of a holomorphic null curve*, J. Reine Angew. Math. **2018** (2018), 77–109.
- C2. A. Alarcón, — , *Complete densely embedded complex lines in \mathbb{C}^2* , Proc. Amer. Math. Soc. **146** (2018), 1059-1067.
- C3. — , F. Lárusson, *The Oka principle for holomorphic Legendrian curves in \mathbb{C}^{2n+1}* , Math. Z. **288** (2018), 643-663.
- C4. *Divisors defined by noncritical functions*, Proc. Amer. Math. Soc. **146** (2018), 2985-2994.
- C5. *Holomorphic embeddings and immersions of Stein manifolds: a survey*, 12th Korean Conference on Several Complex Variables, Gyeongju, Koreja, julij 2017, Geometric complex analysis: in honor of Kang-Tae Kim's 60th birthday, Gyeongju, Korea, 2017 (Springer Proceedings in Mathematics & Statistics, 246), 145-169.
- D1. Član uredniškega odbora revije *International Journal of Mathematics*.
- F1. *A properly embedded holomorphic disc in the ball with finite area and dense boundary curve*, vabljeno predavanje, Universidad de Granada, Departamento de Geometría y Topología, Granada, Španija, februar 2018.
- F2. *Runge tubes*, vabljeno predavanje, Sabanci University, Carigrad, Turčija, marec 2018.
- F3. *Runge tubes*, vabljeno predavanje, 2nd Central European Complex Analysis Meeting, Dunaj, Avstrija, april 2018.
- F4. *Nonlinear holomorphic approximation theory*, vabljeno predavanje, Complex Analysis and Related Topics, Sankt Peterburg, Rusija, april 2018.
- F5. *New developments in nonlinear holomorphic approximation theory*, vabljeno predavanje, CR Geometry and PDEs - VIII, Levico Terme (Trento), Italija, junij 2018.
- F6. *Runge tubes*, vabljeno predavanje, HAYAMA Symposium on Complex Analysis in Several Variables XX & Pacific Rim Complex-Symplectic Geometry Conference, Kanagawa, Japonska, julij 2018.
- F7. *Runge tubes*, vabljeno predavanje, Holomorphic Elliptic Geometry and Group Actions, CUSO minicourse and SMS Autumn Conference, Bern, Švica, september 2018.
- F8. *New complex analytic methods in the theory of minimal surfaces*, vabljeno predavanje, International Centre for Theoretical Physics (ICTP),

Trst, Italija, december 2018.

- F9. *H-principle for complex contact structures on Stein manifolds*, vabljeno predavanje, Analysis and CR geometry, Dunaj, Avstrija, december 2018.
- I1. Mentorstvo pri enem magistrskem delu in enem delu diplomskega seminarja.
- I2. Strokovni sestavek *Brešar, Matej* v Novem slovenskem biografskem leksikonu.

Maja Fošner:

- B1. —, B. Marcen, J. Vukman, *On functional equation related to (m, n) -Jordan centralizers in prime rings*, sprejeto v objavo v Bull. Malays. Math. Sci. Soc.
- C1. —, B. Marcen, J. Vukman, *On functional equation related to a class of generalized inner derivations in prime rings*, Bull. Malays. Math. Sci. Soc. **41** (2018), 687–707.
- C2. —, B. Marcen, J. Vukman, *A result in the spirit of Herstein theorem*, Glas. Mat. Ser. III **53** (2018), 73–95.
- C3. —, B. Marcen, J. Vukman, *On some functional equation arising from (m, n) -Jordan derivations of prime rings*, Publ. Math. Debrecen **92** (2018), 133–146.
- F1. *Modern logistics learning: certified module on master study level (MLL)*, vabljeno predavanje, Student Symposium ISSLIB 2018, Izmir, Turčija, november 2018.

David Gajser:

- C1. —, B. Mohar, *Minimal normal graph covers*, Combinatorica **38** (2018), 1415–1436.

Josip Globevnik:

- C1. —, D. Kalaj, *On holomorphic functions with cluster sets of finite linear measure*, Math. Z. **289** (2018), 355–360.
- F1. *On complete complex hypersurfaces in \mathbb{C}^N* , vabljeno predavanje, Complex Analysis and Related Topics, Sankt Peterburg, Rusija, april 2018.

Mateja Grašič:

- C1. D. Benkovič, — , *Generalized skew derivations on triangular algebras determined by action on zero products*, Comm. Algebra **46** (2018), 1859–1867.
- I1. Mentorstvo pri 2 magistrskih delih.

Andreas Hinz:

- A1. — , S. Klavžar, C. Petr, *The Tower of Hanoi - Myths and Maths*. 2nd ed., Birkhäuser, Cham, Švica, 2018.
- C1. S. Varghese, A. Vijayakumar, — , *Power domination in Knödel graphs and Hanoi graphs*, Discuss. Math. Graph Theory **38** (2018), 63–74.
- C2. A. Heeffer, — , “*A difficult case*”: *Pacioli and Cardano on the Chinese rings*, Recreat. Math. Mag. **8** (2018), 5–23.
- C3. *Open problems for Hanoi and Sierpiński Graphs*, International Conference on Current Trends in Graph Theory and Computation , New Delhi, Indija, september 2016, International Conference on Current Trends in Graph Theory and Computation (Electronic notes in discrete mathematics, 63), 23–31.

Barbara Ikica:

- B1. D. Dimitrov, — , R. Škrekovski, *Maximum external Wiener index of graphs*, sprejeto v objavo v Discrete Appl. Math.

Vesna Iršič:

- B1. *Effect of predomination and vertex removal on the game total domination number of a graph*, sprejeto v objavo v Discrete Appl. Math.
- C1. *Strong geodetic number of complete bipartite graphs and of graphs with specified diameter*, Graphs Combin. **34** (2018), 443–456.
- C2. — , S. Klavžar, *Strong geodetic problem on Cartesian products of graphs*, RAIRO Oper. Res. **52** (2018), 205–216.
- G1. *Effect of predomination and vertex removal on the game total domination number of a graph*, Symbolic Data Analysis Workshop, Veszprém, Madžarska, 2018.

Marko Jakovac:

- B1. C. Bujtás, — , *Relating the total domination number and the annihilation number of cactus graphs and block graphs*, sprejeto v objavo v *Ars Math. Contemp.*
- B2. *Relating the annihilation number and the 2-domination number of block graphs*, sprejeto v objavo v *Discrete Appl. Math.*
- C1. T. Gologranc, — , I. Peterin, *The security number of lexicographic products*, *Quaest. Math.* **41** (2018), 601–613.
- C2. — , I. Peterin, *The b-chromatic number: a survey*, *Discrete Appl. Math.* **235** (2018), 184–201.
- F1. *The annihilation number and domination invariants*, vabljeno predavanje, Institute of Mathematics and Mechanics Ural Branch of Russian Academy of Sciences, Jekaterinburg, Rusija, junij 2018.
- G1. *The annihilaton number and domination invariants*, 31st Ljubljana - Leoben Graph Theory Seminar, Leoben, Avstrija, september 2018.
- II. 5 recenzij za MathSciNet.
- I2. Mentorstvo pri 6 magistrskih delih.

Blaž Jelenc:

- C1. — , J. Tušek, *Vozel : zastarel in le redko uporaben vezni element : ali je uporaben tudi v zdajšnjem času v sodobni industriji?*, *Ventil (Ljubl.)* **24** (2018), 406–410.

Aleksandar Jurišić:

- B1. — , J. Vidali, *The Sylvester graph and Moore graphs*, sprejeto v objavo v *European J. Combin.*
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- II. Somentorstvo pri enem in mentorstvo pri 3 diplomskih delih.

Marko Kandić:

- B1. R. Drnovšek, — , *Positive operators as commutators of positive operators*, sprejeto v objavo v *Studia Math.*

- B2. — , A. Vavpetič, *Topological aspects of order in $C(X)$* , sprejeto v objavo v Positivity.
- C1. *A note on spectral sublinearity for collections of positive compact operators on Banach lattices*, Spec. Matrices **6** (2018), 369–375.
- C2. — , A. Vavpetič, *The countable sup property for lattices of continuous functions*, J. Math. Anal. Appl. **465** (2018), 588–603.
- C3. — , M. A. Taylor, *Metrizability of minimal and unbounded topologies*, J. Math. Anal. Appl. **466** (2018), 144–159.
- C4. — , H. Li, V. G. Troitsky, *Unbounded norm topology beyond normed lattices*, Positivity **22** (2018), 745–760.
- E1. Član organizacijskega odbora konference *Vidav - spiritus agens slovenske matematike*, Ljubljana, januar 2018.
- II. Mentorstvo pri enem delu diplomskega seminarja.

Michael Kaplin:

- F1. *Relatively uniformly continuous semigroups on vector lattices*, vabljeno predavanje, Semigroups of Operators: Theory and Applications, Kazimierz Dolny, Poljska, september/oktober 2018.

Aleksander Kelenc:

- C1. — , N. Tratnik, I. G. Yero, *Uniquely identifying the edges of a graph : the edge metric dimension*, Discrete Appl. Math. **251** (2018), 204–220.

Sandi Klavžar:

- A1. A. M. Hinz, — , C. Petr, *The Tower of Hanoi - Myths and Maths*. 2nd ed., Birkhäuser, Cham, Švica, 2018.
- A2. M. Chudnovsky, M. Doob, M. Krebs, A. Shaheen, R. H. Hammack, — , W. Imrich, *Graph families*, poglavje v *Handbook of discrete and combinatorial mathematics*, str. 669–679, CRC Press, Boca Raton, ZDA, 2018.
- C1. B. Brešar, — , D. F. Rall, K. Wash, *Packing chromatic number versus chromatic and clique number*, Aequationes Math. **92** (2018), 401–412.
- C2. — , S. S. Zemljič, *Connectivity and some other properties of generalized Sierpiński graphs*, Appl. Anal. Discrete Math. **12** (2018), 401–412.

- C3. Y. Alizadeh, —, *On graphs whose Wiener complexity equals their order and on Wiener index of asymmetric graphs*, Appl. Math. Comput. **328** (2018), 113–118.
- C4. —, D. A. Jemilet, I. Rajasingh, P. Manuel, N. Parthiban, *General transmission lemma and Wiener complexity of triangular grids*, Appl. Math. Comput. **338** (2018), 115–122.
- C5. J. Azarija, —, Y. Rho, S. Sim, *On domination-type invariants of Fibonacci cubes and hypercubes*, Ars Math. Contemp. **14** (2018), 387–395.
- C6. P. Manuel, —, *A general position problem in graph theory*, Bull. Aust. Math. Soc. **98** (2018), 177–187.
- C7. —, P. Manuel, *Strong geodetic problem in grid like architectures*, Bull. Malays. Math. Sci. Soc. **41** (2018), 1671–1680.
- C8. M. A. Henning, —, *Infinite families of circular and Möbius ladders that are total domination game critical*, Bull. Malays. Math. Sci. Soc. **41** (2018), 2141–2149.
- C9. —, S. Li, H. Zhang, *On the difference between the (revised) Szeged index and the Wiener index of cacti*, Discrete Appl. Math. **247** (2018), 77–89.
- C10. M. A. Henning, —, D. F. Rall, *Game total domination critical graphs*, Discrete Appl. Math. **250** (2018), 28–37.
- C11. XU, Kexiang, LI, Xia, —, *On graphs with largest possible game domination number*, Discrete Math. **341** (2018), 1768–1777.
- C12. —, K. P. Narayankar, S. P. Narayankar, D. Shubhalakshmi, *Simplified constructions of almost peripheral graphs and improved embeddings into them*, Filomat **32** (2018), 1193–1198.
- C13. P. Manuel, —, *The graph theory general position problem on some interconnection networks*, Fund. Inform. **163** (2018), 339–350.
- C14. K. Xu, H. Liu, K. C. Das, —, *Embeddings into almost self-centered graphs of given radius*, J. Comb. Optim. **36** (2018), 1388–1410.
- C15. —, M. J. Nadjafi-Arani, *Partition distance in graphs*, J. Math. Chem. **56** (2018), 69–80.
- C16. V. Iršič, —, *Strong geodetic problem on Cartesian products of graphs*, RAIRO Oper. Res. **52** (2018), 205–216.
- 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*.
- F1. *Strong geodetic problem*, vabljen predavanje, 8th Cracow Conference on Graph Theory “Rytro ’18”, Krakov, Poljska, september 2018.
 F2. *Domination game and minimal edge cuts*, vabljen predavanje, Symbolic Data Analysis Workshop, Veszprém, Madžarska, 2018.
- G1. *Partition distance in graphs*, 1138th AMS Meeting, Nashville, ZDA, april 2018.
 G2. *Partition distance in graphs*, XIV. Serbian Mathematical Congress, Kragujevac, Srbija, maj 2018.
- II. Ena recenzija za Zentralblatt MATH.
 II. Mentorstvo pri eni doktorski disertaciji in 3 magistrskih delih.

Igor Klep:

- C1. J. W. Helton, —, J. Volčič, *Geometry of free loci and factorization of noncommutative polynomials*, Adv. Math. **331** (2018), 589–626.
 C2. M. Brešar, C. Hanselka, —, J. Volčič, *Skolem-Noether algebras*, J. Algebra **498** (2018), 294–314.
 C3. —, J. Polh, J. Volčič, *Minimizer extraction in polynomial optimization is robust*, SIAM J. Optim. **28** (2018), 3177–3207.
 C4. —, Š. Špenko, J. Volčič, *Positive trace polynomials and the universal Procesi-Schacher conjecture*, Proc. Lond. Math. Soc. (3) **117** (2018), 1101–1134.
 C5. E. Evert, J. W. Helton, —, S. McCullough, *Extreme points of matrix convex sets, free spectrahedra, and dilation theory*, J. Geom. Anal. **28** (2018), 1373–1408.
 C6. M. Augat, J. W. Helton, —, S. McCullough, *Bianalytic maps between free spectrahedra*, Math. Ann. **371** (2018), 883–959.

- C7. *The real spectrum of a noncommutative ring and the Artin-Lang homomorphism theorem*, *Algebr. Represent. Theory* **21** (2018), 1–17.
- D1. Član uredniškega odbora revije *Complex Analysis and Operator Theory*.
- E1. Podpredsednik konference *International Workshop on Operator Theory and its Applications (IWOTA)*, ZDA, 2018.
- E2. Organizator sekcije “Free Convexity and Free Analysis” konference *Joint Mathematics Meeting JMM-AMS*, San Diego, ZDA, januar 2018.
- E3. Organizator sekcije “Positivity, Factorizations, and State Space Realizations for Scalar and Matrix Variables” konference *International Symposium on the Mathematical Theory of Networks and Systems (MTNS)*, Hong Kong, Kitajska, julij 2018.
- E4. Organizator sekcije “Free Analysis and Free Real Algebraic Geometry” konference *International Workshop on Operator Theory and its Applications (IWOTA)*, Šanghaj, Kitajska, julij 2018.
- F1. *Positive trace polynomials and the Procesi-Schacher conjecture*, vabljeno predavanje, AMS Special Session on Free Convexity and Free Analysis, Joint Mathematics Meetings, San Diego, ZDA, januar 2018.
- F2. *Linear matrix inequalities, Positivstellensätze and coin tossing*, seminarsko predavanje, University of California, San Diego, ZDA, januar 2018.
- F3. *The Singularity Sets of a Linear Matrix Inequality in Matrix Variables*, vabljeno predavanje, International Symposium on the Mathematical Theory of Networks and Systems (MTNS), Hong Kong, Kitajska, julij 2018.
- F4. *A Nullstellensatz for noncommutative polynomials and factorization in free algebras*, vabljeno predavanje, International Workshop on Operator Theory and its Applications (IWOTA), Šanghaj, Kitajska, julij 2018.
- F5. *Dilations, inclusion of matrix convex sets, Positivstellensätze, and coin tossing*, seminarsko predavanje, Victoria University, Wellington, Nova Zelandija, september 2018.
- F6. *Positive trace polynomials and the Procesi-Schacher conjecture*, seminarsko predavanje, Universität Konstanz, Nemčija, oktober 2018.
- F7. *Positive trace polynomials and the Procesi-Schacher conjecture*, seminarsko predavanje, Universität Innsbruck, Avstrija, november 2018.
- I1. Mentor doktorata Bena Lawrenca (University of Auckland).
- I2. Mentorstvo pri eni diplomii (University of Auckland) in 2 magistrskih delih (FMF).

- I3. Član panela “Mathematics, Information science and Statistics (MIS)” za podeljevanje projektov, Royal Society of New Zealand.
- I4. Recenzija enega univerzitetnega učbenika.

Marjetka Knez:

- C1. —, E. Žagar, *Interpolation of circular arcs by parametric polynomials of maximal geometric smoothness*, Comput. Aided Geom. Design **63** (2018), 66–77.
- C2. *G^1 motion interpolation using cubic PH biarcs with prescribed length*, Comput. Aided Geom. Design **67** (2018), 21–33.
- C3. Grošelj, —, *A B-spline basis for C^1 quadratic splines on triangulations with a 10-split*, J. Comput. Appl. Math. **343** (2018), 413–427.
- E1. Organizacija konference *Workshop Ljubljana-Linz*, Fakulteta za matematiko in fiziko, Ljubljana, julij 2018.
- F1. *Rigid-body motion interpolation using cubic PH biarcs*, vabljeno predavanje, INdAM Workshop DREAMS, Rim, Italija, januar 2018.
- F2. *On constructions of splines over triangulations*, predavanje v sklopu bilateralnega projekta, Johannes Kepler Universität, Linz, Avstrija, november 2018.
- G1. *Rigid-body motion interpolation using cubic PH biarcs with prescribed length*, 9th International Conference on Curves and Surfaces, Arcachon, Francija, junij 2018.
- I1. Mentorstvo pri 5 magistrskih delih in 2 delih diplomskega seminarja.

Damjana Kokol-Bukovšek:

- C1. D. Dolžan, —, B. Kuzma, *On the lower bound for diameter of commuting graph of prime-square sized matrices*, Filomat **32** (2018), 5993–6000.
- D1. Gostujoča urednica revije *Special Matrices*.
- G1. *Asymmetry of copulas arising from shock models*, 14th International conference on Fuzzy set Theory and Applications (FSTA), Liptovský Ján, Slovaška, januar/februar 2018.
- I1. Mentorstvo pri 4 delih diplomskega seminarja.

Tim Kos:

- C1. B. Brešar, T. R. Hartinger, — , M. Milanič, *1-perfectly orientable K_4 -minor-free and outerplanar graphs*, Discrete Appl. Math. **248** (2018), 33–45.
- C2. B. Brešar, T. R. Hartinger, — , M. Milanič, *On total domination in the Cartesian product of graphs*, Discuss. Math. Graph Theory **38** (2018), 963–976.
- C3. B. Brešar, T. Gologranc, — , *Convex and isometric domination of (weak) dominating pair graphs*, Theoret. Comput. Sci. **730** (2018), 32–43.

Tomaž Košir:

- F1. *Asymmetry for bivariate copulas and shock models*, seminarsko predavanje, Taras Shevchenko National University of Kyiv, Kijev, Ukrajina, december 2018.
- G1. *Inverse maxmin copulas and modeling quadrant subindependence*, 14th International conference on Fuzzy set Theory and Applications (FSTA), Liptovský Ján, Slovaška, januar/februar 2018.

Jernej Kozak:

- C1. G. Jaklič, — , *On parametric polynomial circle approximation*, Numer. Algorithms **77** (2018), 433-450.

Marjeta Kramar Fijavž:

- B1. K.-J. Engel, — , *Waves and diffusion on metric graphs with general vertex conditions*, sprejeto v objavo v Evol. Equ. Control Theory.
- E1. Soorganizatorka sekcije “Linear operator theory and applications” konference *European Women in Mathematics General Meeting*, Gradec, Avstrija, september/oktober 2018.
- E2. Soorganizatorka sekcije “Semigroups on networks and further ramified structures” konference *Semigroups of Operators: Theory and Applications*, Kazimierz Dolny, Poljska, september/oktober 2018.

- F1. *Perturbation methods for differential operators on networks*, vabljeno predavanje, FG-AIMS Workshop “Evolutionary Processes on Networks”, Kigali, Ruanda, marec 2018.
- F2. *Operator semigroups approach to transport processes on metric graphs*, vabljeno predavanje, Sveučilište u Zagrebu, Prirodoslovno matematički fakultet, Zagreb, Hrvaška, maj 2018.
- F3. *Dynamische Netzwerke*, vabljeno predavanje, Vier Mathematikerinnen, vier Perspektiven - Berichte aus aktueller Forschung, Tübingen, Nemčija, julij 2018.
- F4. *Operator semigroups approach to dynamical processes on metric graphs*, vabljeno predavanje, Joint Meeting of the Czech, Slovenian, Austrian, Slovak and Catalan Mathematical Societies, Bratislava, Slovaška, september 2018.
- G1. *On perturbing the domain of certain generators*, Semigroups of Operators: Theory and Applications, Kazimierz Dolny, Poljska, september/oktober 2018.
- H1. J. Zevnik, — , D. Kozelj, *Učinkovita particija vodovodnih omrežij na merilna območja z uporabo teorije grafov = Efficient partitioning of water distribution networks using a graph-theoretical approach*, Acta Hydrotech. **31** (2018), št. 54, 35–50.
- I1. Avtorica enega univerzitetnega učnega gradiva.
- I2. Mentorstvo enega magistrskega in enega diplomskega dela.

Tadeja Kraner Šumenjak:

- B1. S. Brezovnik, — , *Complexity of k -rainbow independent domination and some results on the lexicographic product of graphs*, sprejeto v objavo v Appl. Math. Comput.
- B2. M. Ošljaj, — , M. Lakota, P. Vindiš, *Parametric and nonparametric approaches for detecting the most important factors in biogas production*, sprejeto v objavo v Pol. J. Environ. Stud.
- C1. — , D. F. Rall, A. Tepesh, *On k -rainbow independent domination in graphs*, Appl. Math. Comput. **333** (2018), 353-361.
- G1. *Complexity of k -rainbow independent domination and some result on the lexicographic product of graphs*, 2nd Croatian Combinatorial Days, Zagreb, Hrvaška, september 2018.

- I1. Somentorstvo pri 3 magistrskih in 2 diplomskih delih.
- I2. Piska recenzij za revije: "Journal of environmental management", "Journal of Combinatorial Optimization", "Discussiones Mathematicae. Graph Theory" ter "Discrete Applied Mathematics".
- I3. Avtorica enega univerzitetnega učnega gradiva.
- I4. Opravljenih 55 ur predavanj tujim študentom v okviru programa ERA-SMUS+ na Fakulteti za kmetijstvo in biosistemske vede Univerze v Mariboru v študijskem letu 2017/2018.

Ganna Kudryavtseva:

- C1. *Free skew Boolean intersection algebras and set partitions*, Order **35** (2018), 1–22.
- F1. *Skew Boolean algebras*, vabljeno predavanje, Non-commutative structures 2018: a workshop in honor of Jonathan Leech, Portorož, maj 2018.
- F2. *On expansions of monoids*, vabljeno predavanje, International conference on semigroups on the occasion of Maria Szendrei's 65th birthday, Lizbona, Portugalska, julij 2018.
- I1. 2 recenziji za MathSciNet.

Bojan Kuzma:

- B1. G. Dolinar, A. È. Guterman, — , O. Markova, *Double centralizing theorem with respect to q -commutativity relation*, sprejeto v objavo v J. Algebra Appl.
- C1. G. Dolinar, — , N. Stopar, *Characterization of orthomaps on the Cayley plane*, Aequationes Math. **92** (2018), 243–265.
- C2. *Dimensions of complex Hilbert spaces are determined by the commutativity relation*, J. Operator Theory **79** (2018), 201–211.
- C3. G. Dolinar, — , J. Marovt, *A note on commutativity preserving maps on $M_n(\mathbb{R})$* , Oper. Matrices **12** (2018), 117–131.
- C4. G. Dolinar, A. Guterman, — , O. Markova, *Extremal generalized centralizers in matrix algebras*, Comm. Algebra **46** (2018), 3147–3154.
- C5. D. Dolžan, D. Kokol Bukovšek, — , *On the lower bound for diameter of commuting graph of prime-square sized matrices*, Filomat **32** (2018), 5993–6000.

- D1. Član uredniškega odbora revije *Linear and Multilinear Algebra*.
 D2. Področni urednik revije *Special Matrices*.
 F1. *Fundamental theorem on orthomaps over certain projective spaces*, vabljeno predavanje, Ankara University, Department of Mathematics, Ankara, Turčija, november 2018.

Boštjan Kuzman:

- C1. —, A. Malnič, P. Potočnik, *Tetravalent vertex- and edge-transitive graphs over doubled cycles*, J. Combin. Theory Ser. B **131** (2018), 109–137.
 G1. *Kombinatorične lastnosti dreves kot izziv za nadarjene = Combinatorial properties of trees as a challenge for talented pupils*, 4. mednarodna konferenca o učenju in poučevanju matematike, Laško, junij 2018.
 G2. *Elektronska vadnica in preverjanje znanja iz verjetnostnega računa na visokošolskem nivoju.*, Izzivi in priložnosti za inovativne oblike poučevanja in učenja z uporabo IKT, Ljubljana, september 2018.
 I1. Mentorstvo pri enem magistrskem in 3 diplomskih delih.

Uroš Kuzman:

- C1. F. Bertrand, —, *Local approximation of non-holomorphic discs in almost complex manifolds*, J. Math. Anal. Appl. **458** (2018), 123–133.
 C2. *On Poletsky theory of discs in compact manifolds*, Proc. Amer. Math. Soc. **146** (2018), 4767–4774.
 F1. *On Poletsky discs in compact manifolds*, seminarsko predavanje, Université Lille-1, Lille, Francija, februar 2018.
 F2. *On Poletsky discs in compact manifolds*, seminarsko predavanje, Università degli Studi di Roma Tor Vergata, Rim, Italija, oktober 2018.
 H1. *Uganke iz oddaje Ugriznimo znanost*, Obzornik Mat. Fiz. **65** (2018), 26–33.
 H2. *Zlobni test matematične intuicije*, Obzornik Mat. Fiz. **65** (2018), 151–157.
 I1. Sodelovanje v oddaji *Ugriznimo znanost* (RTVSLO).
 I2. Mentorstvo pri 4 delih diplomskega seminarja.

Boštjan Lemež:

- A1. *Posplošene inverzne limite indeksirane z množico celih števil*, magistrsko delo, Univerza v Mariboru, Fakulteta za naravoslovje in matematiko, Oddelek za matematiko in računalništvo, Maribor, 2018.
- B1. *An uncountable family of upper semicontinuous functions F such that the graph of F is homeomorphic to the inverse limit of closed unit intervals with F as the only bonding function*, sprejeto v objavo v *Topology Appl.*
- G1. *An upper semicontinuous function f whose graph is homeomorphic to the inverse limit of closed unit intervals with f as a bonding function*, 52nd Spring Topology and Dynamical Systems Conference, Auburn, ZDA, marec 2018.

Bojan Magajna:

- B1. *Operator systems and C^* -extreme points*, sprejeto v objavo v *Studia Math.*
- C1. *Maps with the unique extension property and C^* -extreme points*, *Complex Anal. Oper. Theory* **12** (2018), 1903–1927.
- C2. *On the range inclusion for normal derivations on C^* -algebras*, *Proc. Edinb. Math. Soc.* (2) **61** (2018), 1–11.
- D1. Član uredniškega odbora revije *Operators and Matrices*.
 - I1. Avtor enega univerzitetnega učbenika.
 - I2. Ena recenzija za *MatSciNet*.
 - I3. Mentorstvo pri enem delu diplomskega seminarja.

Aleksander Malnič:

- B1. —, R. Požar, *On split liftings with sectional complements*, sprejeto v objavo v *Math. Comp.*
- C1. B. Kuzman, —, P. Potočnik, *Tetravalent vertex- and edge-transitive graphs over doubled cycles*, *J. Combin. Theory Ser. B* **131** (2018), 109–137.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.

- E1. Član znanstvenega odbora konference 8th *PhD Summer School in Discrete Mathematics*, Rogla, Slovenija, julij 2018.
- E2. Soorganizator mini-simpozija konference *CSASC 18 - Joint Meeting of the Czech, Slovenian, Austrian, Slovak and Catalan Mathematical Societies*, Bratislava, Slovaška, september 2018.
- F1. *On reflexible polynomials*, vabljeno predavanje, International Workshop on Symmetries of Graph and Networks, Sanya, Kitajska, januar/februar 2018.
- F2. *On reflexible polynomials*, vabljeno predavanje, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.
- F3. *On the simultaneous conjugacy problem*, vabljeno predavanje, 3rd International Conference On Group Actions and Transitive Graphs, Shenzhen, Kitajska, oktober 2018.

Tilen Marc:

- A1. *Cycling in hypercubes*, doktorska disertacija, Univerza Ljubljana, Fakulteta za matematiko in fiziko, Oddelek za matematiko, Matematika - 3. stopnja, Ljubljana, 2018.
- B1. B. Brešar, C. Bujtás, T. Gologranc, G. Košmrlj, — , B. Patkós, Z. Tuza, M. Vizer, *On Grundy total domination number in product graphs*, sprejeto v objavo v *Discuss. Math. Graph Theory*.
- C1. — , L. Šubelj, *Convexity in complex networks*, *Network Science* **6** (2018), 176–203.
- C2. J. Azarija, — , *There is no $(75, 32, 10, 16)$ strongly regular graph*, *Linear Algebra Appl.* **557** (2018), 62–83.
- G1. *Vložitve časovnih omrežij v vektorski prostor za odkrivanje vandalov in goljufov*, *NetSlo'18*, Ljubljana, januar 2018.
- G2. *Functional encryption – decrypting statistical functions over encrypted messages*, 13th International IFIP Summer School on Privacy and Identity Management, Dunaj, Avstrija, avgust 2018.

Janko Marovt:

- B1. B. Ungor, S. Halicioglu, A. Harmanci, — , *Partial orders on the power sets of Baer rings*, sprejeto v objavo v *J. Algebra Appl.*

- C1. *Orders in rings based on the core-nilpotent decomposition*, Linear Multilinear Algebra **66** (2018), 803–820I.
- C2. G. Dolinar, — , *On a generalized concept of order relations on $B(H)$* , Math. Slovaca **68** (2018), 33–40.
- C3. G. Dolinar, B. Kuzma, — , *A note on commutativity preserving maps on $M_n(\mathbb{R})$* , Oper. Matrices **12** (2018), 117–131.
- C4. *On partial orders in proper $*$ -rings*, Rev. Un. Mat. Argentina **59** (2018), 193–204.

- F1. *On partial orders in rings*, vabljeno predavanje, Ankara University, Department of Mathematics, Ankara, Turčija, november 2018.

- I1. Mentor pri enem magistrskem delu.
- I2. Pisec recenzij za revije: “Linear and Multilinear Algebra”, “Naše gospodarstvo”, “Banach Journal of Mathematical Analysis”, “Communications. Faculty of Sciences. University of Ankara. Series A1. Mathematics and Statistics”.
- I3. 8 recenzij za Zentralblatt MATH.
- I4. 6 recenzij za MathSciNet.

Dragan Marušič:

- B1. S. H. Koike Quintanar, I. Kovács, — , M. Muzychuk, *Cyclic groups are CI-groups for balanced configurations*, sprejeto v objavo v Des. Codes Cryptogr.
- B2. K. Kutnar, — , *Odd extensions of transitive groups via symmetric graphs - the cubic case*, sprejeto v objavo v J. Combin. Theory Ser. B.
- B3. K. Kutnar, — , Š. Miklavič, P. Šparl, *The classification of 2-extendable edge-regular graphs with diameter 2*, sprejeto v objavo v Electron. J. Combin.

- C1. A. Hujdurović, K. Kutnar, — , *On normality of n -Cayley graphs*, Appl. Math. Comput. **332** (2018), 469–476.
- C2. A. Hujdurović, K. Kutnar, — , *Enumerating graphs via even/odd dichotomy*, Discrete Appl. Math. **247** (2018), 252–262.
- C3. *Semiregular automorphisms in vertex-transitive graphs of order $3p^2$* , Electron. J. Combin. **25** (2018), art. P2.25, 10 str.
- C4. I. Kovács, K. Kutnar, — , D. Pellicer, *On even-closed regular embeddings of graphs*, European J. Combin. **73** (2018), 153–169.

- 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, International Workshop on Symmetries of Graph and Networks, Sanya, Kitajska, januar/februar 2018.
- F2. *Hamiltonicity of vertex-transitive graphs : the pq case I*, vabljeno predavanje, 3rd International Conference On Group Actions and Transitive Graphs, Shenzhen, Kitajska, oktober 2018.
- F3. *Hamilton cycles in vertex-transitive graphs of order a product of two primes*, vabljeno predavanje, University of the Basque Country (Euskal Herriko Unibertsitatea), Leioa, Španija, avgust 2018.

Matej Mencinger:

- A1. T. Letnik, — , S. Božičnik, *Dynamic management of urban last-mile deliveries*, poglavje v *City logistics - Modeling and planning initiatives*, str. 3–37, ISTE Ltd., London, Velika Britanija, 2018.
- C1. — , B. Ferčec, W. Fernandes, R. Oliveira, *Linearizability problem of persistent centers*, Electron. J. Qual. Theory Differ. Equ. **2018** (2018), art. no. 37, 27 str.
- C2. M. Žulj, B. Ferčec, — , *The solution of some persistent p : $-q$ resonant center problems*, Electron. J. Qual. Theory Differ. Equ. **2018** (2018), art. no. 99, 21 str.
- C3. T. Letnik, A. Farina, — , M. Lupi, S. Božičnik, *Dynamic management of loading bays for energy efficient urban freight deliveries*, Energy **159** (2018), 916–928.
- C4. B. Zalar, — , *Near-idempotents, near-nilpotents and stability of critical points for riccati equations*, Glas. Mat. Ser. III **53** (2018), 331–342.
- C5. T. Letnik, — , S. Božičnik, *Energy aspects of urban last mile delivery = Energetski vidiki dostav v mestih*, J. Energy Tech. **11** (2018), 33–43.
- C6. T. Letnik, — , S. Božičnik, *Dynamic assignment of loading bays for efficient urban last mile deliveries*, Šesti skup mladih istraživača iz područja građevinarstva i srodnih tehničkih znanosti, Split, Hrvaška, september 2018, Zbornik radova, 126–133.
- F1. *On linearizability of some persistent centers*, vabljeno predavanje,

3rd Workshop on Dynamical Systems and Applications, Maribor, junij 2018.

- G1. *Sončne ure: ure s preiskovanjem*, 4. mednarodna konferenca o učenju in poučevanju matematike, Laško, junij 2018.
- G2. *Stability and quadratizations in homogeneous polynomial systems of odes*, International Conference on Algebra and Related Topics, ICART, Rabat, Maroko, julij 2018.
- G3. *Dynamic assignment of loading bays for efficient urban last mile deliveries*, Šesti skup mladih istraživača iz područja građevinarstva i srodnih tehničkih znanosti, Split, Hrvaška, september 2018.
- H1. M. Sovič, T. Letnik, —, *Steinerjev problem s praktičnim primerom = Steiner problem with practical example*, *Dianoia* **2** (2018), 39–50.
- I1. Pisec recenzij za revije: “Applied mathematics”, “Asian journal of advances in agricultural research”, “American journal of computational and applied mathematics”, “International journal of statistics and applications”.

Štefko Miklavič:

- B1. M. MacLean, —, *Bipartite distance-regular graphs and taut pairs of pseudo primitive idempotents*, sprejeto v objavo v *Algebr. Comb.*
- B2. K. Kutnar, D. Marušič, —, P. Šparl, *The classification of 2-extendable edge-regular graphs with diameter 2*, sprejeto v objavo v *Electron. J. Combin.*
- B3. —, S. Penjić, *On the Terwilliger algebra of a certain family of bipartite distance-regular graphs with $\Delta_2 = 0$* , sprejeto v objavo v *Art Discr. Appl. Math.*
- B4. R. Jajcay, —, P. Šparl, G. Vasiljević, *On edge-transitive generalizations of Generalized Petersen graphs to higher valences*, sprejeto v objavo v *Electron. J. Combin.*
- C1. B. Frelih, —, *On 2-distance-balanced graphs*, *Ars Math. Contemp.* **15** (2018), 81–95.
- C2. —, P. Šparl, *ℓ -distance-balanced graphs*, *Discrete Appl. Math.* **244** (2018), 143–154.
- C3. *On bipartite Q -polynomial distance-regular graphs with diameter 9, 10, or 11*, *Electron. J. Combin.* **25** (2018), art. P1.52, 12 str.
- C4. R. Jajcay, G. Kiss, —, *Edge-girth-regular graphs*, *European J. Combin.* **72** (2018), 70–82.

- C5. H. Alajbegović, A. Huskanović, — , P. Šparl, *On the extendability of quasi-strongly regular graphs with diameter 2*, *Graphs Combin.* **34** (2018), 711–726.
- C6. M. MacLean, — , S. Penjić, *An A -invariant subspace for bipartite distance-regular graphs with exactly two irreducible T -modules with endpoint 2, both thin*, *Algebraic combinatorics* **48** (2018), 511–548.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- E1. Član znanstvenega odbora konference 8th *PhD Summer School in Discrete Mathematics*, Rogla, Slovenija, julij 2018.

Uroš Milutinović:

- C1. I. Banič, M. Črepnjak, M. Merhar, — , *The (weak) full projection property for inverse limits with upper semicontinuous bonding functions*, *Mediterr. J. Math.* **15** (2018), 1–21.

Bojan Mohar:

- B1. B. M. Ábrego, O. Aichholzer, S. Fernández-Merchant, D. McQuillan, — , P. Mutzel, P. Ramos, R. B. Richter, B. Vogtenhuber, *Bishellable drawings of K_n* , sprejeto v objavo v *SIAM J. Discrete Math.*
- B2. F. Knox, — , *Maximum number of colourings: 4-chromatic graphs*, sprejeto v objavo v *J. Combin. Theory Ser. B*.
- B3. A. Bonato, — , *Topological directions in Cops and Robbers*, sprejeto v objavo v *J. Comb.*
- B4. F. Knox, — , D. Wood, *Exponential golden ratio inequality for vertex degrees of graphs*, sprejeto v objavo v *Amer. Math. Monthly*.
- B5. D. Bokal, Z. Dvorak, P. Hlineny, J. Leanos, — , T. Wiedera, *Bounded maximum degree conjecture holds precisely for c -crossing-critical graphs with $c \leq 12$* , sprejeto v objavo v zborniku 35th *International Symposium on Computational Geometry (SoCG 2019)*, Portland, OR, ZDA, junij 2019.
- C1. D. Gajser, — , *Minimal normal graph covers*, *Combinatorica* **38** (2018), 1415–1436.
- C2. S. A. Hosseini, — , *Game of cops and robbers in oriented quotients of the integer grid*, *Discrete Math.* **341** (2018), 439–450.

- C3. M. Kotrbčik, N. Matsumoto, —, A. Nakamoto, K. Noguchi, K. Ozeki, A. Vodopivec, *Grünbaum colorings of even triangulations on surfaces*, J. Graph Theory **87** (2018), 475–491.
- C4. F. Havet, A. K. Maia, —, *Finding a subdivision of a prescribed digraph of order 4*, J. Graph Theory **87** (2018), 536–560.
- C5. B. Afshari, S. Akbari, M. J. Moghaddamzadeh, —, *The algebraic connectivity of a graph and its complement*, Linear Algebra Appl. **555** (2018), 157–162.
- C6. *The structure of ABC-minimal trees with given number of leaves*, MATCH Commun. Math. Comput. Chem. **79** (2018), 415–430.
- C7. C. A. Alfaro, A. Arroyo, M. Derňár, —, *The crossing number of the cone of a graph*, SIAM J. Discrete Math. **32** (2018), 2080–2093.
- C8. E. Colin de Verdiere, T. Magnard, —, *Embedding graphs into two-dimensional simplicial complexes*, 34th International Symposium on Computational Geometry, Budimpešta, Madžarska, junij 2018, Conference Proceedings, 14 str.
- C9. Z. Dvořák, P. Hliněný, —, *Structure and generation of crossing-critical graphs*, 34th International Symposium on Computational Geometry, Budimpešta, Madžarska, junij 2018, Conference Proceedings, 14 str.
- C10. R. Churchley, —, *A submodular measure and approximate Gomory-Hu theorem for packing odd trails*, 29th Annual ACM-SIAM Symposium on Discrete Algorithms, Philadelphia, ZDA, januar 2018, Proceedings, 210–218.
- C11. Y. Jing, —, *Efficient polynomial-time approximation scheme for the genus of dense graphs*, 59th Annual IEEE Symposium on Foundations of Computer Science, Pariz, Francija, oktober 2018, FOCS 2018, 719–730.
- 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 4th *Annual Conference on Algorithms and Discrete Applied Mathematics (CALDAM 2018)*, Guwahati, Indija, februar 2018.
- E2. Član programskega odbora konference *ACM-SIAM Symposium on Di-*

- crete Algorithms (SODA'19)*, San Diego, CA, ZDA, januar 2019.
- E3. Član organizacijskega odbora konference *Crossing numbers*, Banff, Kanada, oktober 2018.
- F1. *Excluded structure results: Graph minors and graph immersions*, plenarno predavanje, Indo-Canadian School on Algorithms and Combinatorics, Indian Institute of Technology Guwahati, Indija, februar 2018.
- F2. *Totally odd immersions of graphs*, vabljeno predavanje, 1136th Meeting of the AMS, Columbus, OH, ZDA, marec 2018.
- F3. *Graphs on Surfaces, 10 hours Graduate Course*, plenarno predavanje, Challenges in Combinatorial and Discrete Geometry, Barcelona, Španija, maj 2018.
- F4. *On the genus of dense graphs*, plenarno predavanje, 8th LAWCG, VIII Latin American Workshop on Cliques in Graphs, Rio de Janeiro, Brazilija, avgust 2018.
- F5. *Fifty years of the Ringel and Youngs Theorem*, plenarno predavanje, Southwestern German Workshop on Graph Theory, Thomashof, Nemčija, avgust 2018.
- F6. *Fifty years of the Ringel and Youngs Map Colour Theorem*, plenarno predavanje, 27th Workshop "Cycles and Colourings", Nový Smokovec, Slovaška, september 2018.
- F7. *Beauty and challenges of crossing numbers*, plenarno predavanje, 26th International Symposium on Graph Drawing and Network Visualization, GD 2018, Barcelona, Španija, september 2018.
- F8. *Fifty years of the Ringel and Youngs Map Colour Theorem*, vabljeno predavanje, International Workshop on Combinatorial and Computational Aspects of Optimization, Topology and Algebra, ACCOTA 2018, Merida, Mehika, december 2018.
- G1. *Embedding graphs into two-dimensional simplicial complexes*, 34th International Symposium on Computational Geometry, Budimpešta, Madžarska, junij 2018.
- G2. *Structure and generation of crossing-critical graphs*, 34th International Symposium on Computational Geometry, Budimpešta, Madžarska, junij 2018.
- G3. *A submodular measure and approximate Gomory-Hu theorem for packing odd trails*, 29th Annual ACM-SIAM Symposium on Discrete Algorithms, Philadelphia, ZDA, januar 2018.
- G4. *The genus of a random bipartite graph*, 28th Coast Combinatorics Conference, Victoria, BC, Kanada, marec 2018.
- G5. *On the genus of the complete 3-uniform hypergraph*, SIAM Conference

on Discrete Mathematics (DM 18), Denver, ZDA, junij 2018.

- G6. *Efficient polynomial-time approximation scheme for the genus of dense graphs*, 59th Annual IEEE Symposium on Foundations of Computer Science, Pariz, Francija, oktober 2018.
- G7. *50 years of the Ringel and Youngs Map Colour Theorem*, CMS Winter Meeting, Vancouver, Kanada, december 2018.

Blaž Mojškerc:

- G1. *Multivariate copulas arising from shock models*, 14th International conference on Fuzzy set Theory and Applications (FSTA), Liptovský Ján, Slovaška, januar/februar 2018.

11. Somentorstvo pri enem delu diplomskega seminarja.

Giovanni Molica Bisci:

- A1. *Variational and topological methods for nonlocal fractional periodic equations*, poglavje v *Recent Developments in Nonlocal Theory*, str. 359–432, G. Palatucci and T. Kuusi, Eds., De Gruyter Open, Boston, ZDA, 2018.
- C1. V. Ambrosio, L. D’Onofrio, — , *On nonlocal fractional Laplacian problems with oscillating potentials*, Rocky Mountain J. Math. **48** (2018), 1399–1436.
- C2. V. Ambrosio, J. Mawhin, — , *(Super)Critical nonlocal equations with periodic boundary conditions*, Selecta Math. (N.S.) **24** (2018), 3723–3751.
- C3. G. M. Figueiredo, — , R. Servadei, *The effect of the domain topology on the number of solutions of fractional Laplace problems*, Calc. Var. Partial Differential Equations **57** (2018), art. 103, 24 str.
- C4. A. Fiscella, — , R. Servadei, *Multiplicity results for fractional Laplace problems with critical growth*, Manuscripta Math. **155** (2018), 369–388.
- C5. S. Liang, — , B. Zhang, *Multiple solutions for a noncooperative Kirchhoff-type system involving the fractional p -Laplacian and critical exponents*, Math. Nachr. **291** (2018), 1533–1546.
- C6. — , P. Pucci, *Critical Dirichlet problems on \mathcal{H} domains of Carnot groups*, Two Nonlinear Days in Urbino 2017, Università degli Studi di Urbino, Italija, julij 2017, Proceedings (Electronic Journal of Differential Equations, 2018), 179–196.

- C7. — , S. Secchi, *Elliptic problems on complete non-compact Riemannian manifolds with asymptotically non-negative Ricci curvature*, *Nonlinear Anal.* **177** (2018), 637–672.
- 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. *A group-theoretical approach for nonlinear Schrödinger equations*, vabljeno predavanje, Two Nonlinear Days in Perugia, Perugia, Italija, januar 2018.
- F2. *Nonlinear problems with lack of compactness*, vabljeno predavanje, Variational Methods in Analysis, Geometry and Physics, Pisa, Italija, februar 2018.
- F3. *A flower-shape result in Heisenberg groups*, vabljeno predavanje, Recent Advances in Nonlinear Analysis, Levico Terme, Italija, maj 2018.

Primož Moravec:

- B1. *On the exponent of Bogomolov multipliers*, sprejeto v objavo v *J. Group Theory*.
- B2. *On Tamura's identity $yx = f(x, y)$ in groups*, sprejeto v objavo v *Comm. Algebra*.
- B3. *Idempotent-fixing automorphisms of completely regular semigroups*, sprejeto v objavo v *Semigroup Forum*.
- B4. *On finite p -groups satisfying given laws*, sprejeto v objavo v *Monatsh. Math.*
- C1. C. Delizia, U. Jezernik, — , C. Nicotera, *Groups in which every non-nilpotent subgroup is self-normalizing*, *Ars Math. Contemp* **15** (2018), 39–51.
- C2. C. Delizia, U. Jezernik, — , C. Nicotera, *Groups in which every non-abelian subgroup is self-normalizing*, *Monatsh. Math.* **185** (2018), 591–600.
- C3. U. Jezernik, — , *Commutativity preserving extensions of groups*, *Proc. Roy. Soc. Edinburgh Sect. A* **148** (2018), 575–592.

D1. Urednik revije *Ars Mathematica Contemporanea*.

H1. *Monty Hallov paradoks*, Presek **45** (2017/2018), št. 5, 4–5.

I1. Avtor 2 univerzitetnih učnih gradiv.

I2. 2 recenziji za MathSciNet.

Nežka Mramor-Kosta:

C1. H. Varli, M. Pamuk, — , *Perfect discrete Morse functions on connected sums*, Homology Homotopy Appl. **20** (2018), 219–236.

G1. *An algorithmic approach to topological complexity*, Geometric and Topological Methods in Computer Science (GETCO), Oaxaca, Mehika, september 2018.

I1. Ena recenzija za MathSciNet.

Janez Mrčun:

C1. *Monodromy and faithful representability of Lie groupoids*, Topology Appl. **240** (2018), 137–158.

F1. *Fundamental group, foliations and representations of Lie*, vabljeno predavanje, Utrecht Topology Feest, Utrecht, Nizozemska, avgust 2018.

Polona Oblak:

B1. D. Dolžan, — , *Cholesky decomposition of matrices over commutative semirings*, sprejeto v objavo v Linear Multilinear Algebra.

B2. A. Đurić, S. Jevdendić, — , N. Stopar, *The total zero-divisor graph of commutative rings*, sprejeto v objavo v J. Algebra Appl.

C1. D. Dolžan, — , *Bounds for the completely positive rank of a symmetric matrix over a tropical semiring*, Electron. J. Linear Algebra **34** (2018), 152–162.

I1. Ena recenzija za MathSciNet.

I2. Mentorstvo pri 4 magistrskih delih in enem delu diplomskega seminarja.

Matjaž Omladič:

- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D2. Član uredniškega odbora revije *Operators and Matrices*.
- D3. Gostujoči urednik revije *Special Matrices*.

- G1. *Constructing copulas from shock models with imprecise distribution*, 14th International Conference on Fuzzy Set Theory and Applications, Liptovský Ján, Slovaška, januar/februar 2018.

Marko Orel:

- B1. *Nonstandard rank-one nonincreasing maps on symmetric matrices*, sprejeto v objavo v *Linear Multilinear Algebra*.

- G1. *Rank-one nonincreasing maps on symmetric matrices over a field with two or three elements*, *Combinatorics*, Arco (Trento), Italija, junij 2018.

- I1. Mentorstvo pri 3 diplomskih delih.

Nikolaos Papageorgiou:

- A1. — , P. Winkert, *Applied Nonlinear Functional Analysis: An Introduction*, De Gruyter, Berlin, Nemčija, 2018.

- C1. S. Aizicovici, — , V. Staicu, *Sensitivity analysis of parametric elliptic optimal control problems*, *Pure Appl. Funct. Anal.* (2018), 27–42.
- C2. D. Averna, — , E. Tornatore, *Multiple solutions for nonlinear nonhomogeneous resonant coercive problems*, *Discrete Contin. Dyn. Syst. Ser. S* **11** (2018), 155–178.
- C3. D. Averna, — , E. Tornatore, *Positive solutions for the Neumann p -Laplacian*, *Monatsh. Math.* **185** (2018), 557–573.
- C4. Y. Bai, L. Gasiński, — , *Nonlinear nonhomogeneous Robin problems with dependence on the gradient*, *Bound. Value Probl.* **2018** (2018), art. 17, 24 str.
- C5. M. E. Filippakis, — , *Resonant (p, q) -equations with Robin boundary condition*, *Electron. J. Differential Equations* **2018** (2018), art. 1, 24 str.
- C6. L. Gasiński, — , *Positive solutions for the Robin p -Laplacian problem with competing nonlinearities*, *Adv. Calc. Var.* **12** (2018), 31–56.

- C7. L. Gasiński, — , *Periodic solutions for nonlinear nonmonotone evolution inclusions*, Discrete Contin. Dyn. Syst. Ser. B **23** (2018), 219–238.
- C8. L. Gasiński, — , *Resonant Robin problems with indefinite and unbounded potential*, Math. Nachr. **291** (2018), 848–878.
- C9. L. Gasiński, — , *Anti-periodic solutions for nonlinear evolution inclusions*, J. Evol. Equ. **18** (2018), 1025–1047.
- C10. L. Gasiński, — , *Superlinear Robin problems with indefinite linear part*, Sci. Technol. Innov. (Tarn.) **2** (2018), 74–94.
- C11. L. Gasiński, — , *Nodal solutions for nonlinear non-homogeneous Robin problems with an indefinite potential*, Proc. Edinb. Math. Soc. (2) **61** (2018), 943–959.
- C12. S. Hu, — , *Positive solutions for resonant (p, q) -equations with concave terms*, Commun. Pure Appl. Anal. **17** (2018), 2639–2656.
- C13. A. Iannizzotto, — , *Existence and multiplicity results for resonant fractional boundary value problems*, Discrete Contin. Dyn. Syst. Ser. S **11** (2018), 511–532.
- C14. A. Iannizzotto, M. Marras, — , *Constant sign and nodal solutions for nonhomogeneous Robin boundary value problems with asymmetric reactions*, Electron. J. Qual. Theory Differ. Equ. **2018** (2018), art. 71, 28 str.
- C15. S. A. Marano, — , *Asymmetric Robin boundary-value problems with p -Laplacian and indefinite potential*, Electron. J. Differential Equations **2018** (2018), art. 127, 21 str.
- C16. S. A. Marano, S. J. N. Mosconi, — , *On a (p, q) -Laplacian problem with parametric concave term and asymmetric perturbation*, Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur. Rend. Lincei (9) Mat. Appl. **29** (2018), 109–125.
- C17. — , C. Vetro, F. Vetro, *Nonlinear Robin problems with unilateral constraints and dependence on the gradient*, Electron. J. Differential Equations **2018** (2018), art. 182, 14 str.
- C18. — , C. Vetro, F. Vetro, *Existence of positive solutions for nonlinear Dirichlet problems with gradient dependence and arbitrary growth*, Electron. J. Qual. Theory Differ. Equ. **2018** (2018), art. 18, 9 str.
- C19. — , C. Vetro, F. Vetro, *Extremal solutions and strong relaxation for nonlinear multivalued systems with maximal monotone terms*, J. Math. Anal. Appl. **461** (2018), 401–421.
- C20. — , C. Vetro, F. Vetro, *Nonlinear multivalued Duffing systems*, J. Math. Anal. Appl. **468** (2018), 376–390.
- C21. — , C. Vetro, F. Vetro, *Multiple solutions for strongly resonant Robin problems*, Math. Nachr. **291** (2018), 1147–1167.

- C22. — , P. Winkert, *Double resonance for Robin problems with indefinite and unbounded potential*, *Discrete Contin. Dyn. Syst. Ser. S* **11** (2018), 323–344.
- 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*.
- F1. *Dirichlet (p, 2)-equations*, vabljen predavanje, Recent Advances in Non-linear Analysis, Levico Terme, Italija, maj 2018.

Petar Pavešić:

- B1. *Triangulations with few vertices of manifolds with non-free fundamental group*, sprejeto v objavo v *Proc. Roy. Soc. Edinburgh Sect. A*.
- B2. *Topological complexity of a map*, sprejeto v objavo v *Homology Homotopy Appl.*
- B3. D. Govc, W. Marzantowicz, — , *Estimates of covering type and the number of vertices of minimal triangulations*, sprejeto v objavo v *Discrete Comput. Geom.*
- C1. G. R. Conner, W. Herfort, C. Kent, — , *Recognizing the second derived subgroup of free groups*, *J. Algebra* **516** (2018), 396–400.
- C2. G. R. Conner, W. Herfort, — , *Some anomalous examples of lifting spaces*, *Topology Appl.* **239** (2018), 234–243.
- C3. *A topologist's view of kinematic maps and manipulation complexity*, Mini-Workshop Topological Complexity and Related Topics, Oberwolfach, Nemčija, februar/marec 2016, Topological complexity and related topics (*Contemporary mathematics*, 702), 61–83.
- D1. Član uredniškega odbora revije *Obzornik za matematiko in fiziko*.
- F1. *Triangulations with small links are combinatorial*, seminarsko predavanje, Brigham Young University, Provo, ZDA, februar 2018.
- G1. *How do we count components of a lifting space?*, 2018 Arches Topology

- Conference, In honor of Katsuya Eda's career and contributions, Moab (Utah), ZDA, maj 2018.
- G2. *Path components of lifting spaces*, 25 Years of Topology Seminar in Split - Scientific Meeting, Split, Hrvaška, junij 2018.
- G3. *A recognition principle for combinatorial manifolds*, Session "Geometric Aspects of Applied Topology", Joint meeting of the Italian Mathematical Union, the Italian Society of Industrial and Applied Mathematics and the Polish Mathematical Society, Wrocław, Poljska, september 2018.
- I1. Mentorstvo pri enem delu diplomskega seminarja.
- I2. Recenzija enega univerzitetnega učnega gradiva.

Aljoša Peperko:

- B1. *Inequalities on the joint and generalized spectral and essential spectral radius of the Hadamard geometric mean of bounded sets of positive kernel operators*, sprejeto v objavo v Linear Multilinear Algebra.
- B2. *Inequalities on the spectral radius, operator norm and numerical radius of the Hadamard weighted geometric mean of positive kernel operators*, sprejeto v objavo v Linear Multilinear Algebra.
- B3. *Logarithmic convexity of fixed points of stochastic kernel operators*, sprejeto v objavo v Positivity.
- C1. V. Müller, —, *Lower spectral radius and spectral mapping theorem for suprema preserving mappings*, Discrete Contin. Dyn. Syst. **38** (2018), 4117–4132.
- C2. *Uniform boundedness principle for nonlinear operators on cones of functions*, J. Funct. Spaces **2018** (2018), art. id 6783748, 5 str.
- C3. G. Nicollier, —, J. Šter, *Pythagorean theorem: a proof without words*, Math. Mag. **91** (2018), 382–383.
- C4. T. Žužek, —, T. Berlec, J. Kušar, *Izdelava non-delay urnika s pomočjo max-plus algebre*, Studentska tehniška konferenca ŠTeKam, Ljubljana, september 2018, Zbornik del, 190-197.
- F1. *On the spectrum and spectral mapping theorem in max-times algebra*, seminarsko predavanje, Technische Universität Graz, Gradec, Avstrija, oktober 2018.
- G1. *Inequalities on the joint and generalized spectral and essential spectral radius of the Hadamard geometric mean of bounded sets of positive*

kernel operators, Mathematical Inequalities and Applications, Zagreb, Hrvatska, julij 2018.

- I1. Ena zbirka pesmi.
- I2. 3 recenzije za MathSciNet.
- I3. Soavtor dopolnjene izdaja enega univerzitetnega učbenika.
- I4. Pisec recenzij v reviji "Linear Algebra and its Applications".
- I5. Mentor pri enem delu diplomskega seminarja.

Tatjana Petek:

- C1. M. Han, — , V. Romanovski, *Reversibility in polynomial systems of ODE's*, Appl. Math. Comput. **338** (2018), 55–71.
- E1. Članica programskega in organizacijskega odbora konference \mathcal{F}^d *Workshop on Dynamical Systems and Applications*, Maribor, junij 2018.
- I1. Piska recenzij za revije: "Filomat", "Oper. Matrices", "Journal of mathematics and statistics", "Georgian mathematical journal", "Bulletin of the Iranian Mathematical Society", "Linear and Multilinear Algebra", "Linear Algebra and its Applications", "Ukrainian mathematical journal", "Kyungpook mathematical journal", "Publicationes Mathematicae Debrecen".
- I2. Pet recenzij za MathSciNet.

Iztok Peterin:

- B1. A. Cabrera Martínez, — , I. G. Yero, *Independent transversal total domination versus total domination in trees*, sprejeto v objavo v Discuss. Math. Graph Theory.
- B2. M. A. Henning, — , *A characterization of graphs with disjoint total dominating sets*, sprejeto v objavo v Ars Math. Contemp.
- B3. — , I. G. Yero, *Efficient closed domination of digraph products*, sprejeto v objavo v J. Combin. Optim.
- B4. *The complexity of open k -monopolies in graphs for negative k* , sprejeto v objavo v Opuscula Math.
- C1. *Cartesian products of directed graphs with loops*, Discrete Math. **341** (2018), 1336–1343.

- C2. D. Kuziak, — , I. G. Yero, *Bounding the open k -monopoly number of strong product graphs*, Discuss. Math. Graph Theory **38** (2018), 287–300.
- C3. — , J. Schreyer, E. Fecková Škrabul'áková, *A note on the Thue chromatic number of lexicographic products of graphs*, Discuss. Math. Graph Theory **38** (2018), 635–643.
- C4. T. Gologranc, M. Jakovac, — , *The security number of lexicographic products*, Quaest. Math. **41** (2018), 601–613.
- C5. — , P. Žigert Pleteršek, *Wiener index of strong product of graphs*, Opuscula Math. **38** (2018), 81–94.
- C6. M. Jakovac, — , *The b -chromatic number: a survey*, Discrete Appl. Math. **235** (2018), 184–201.
- F1. *A forbidden subgraph characterization of some graph classes*, vabljeno predavanje, 21st Workshop on Hereditary Graph Properties, Stryszawa, Poljska, november 2018.
- G1. *Efficient open domination of digraph products*, 8th Cracow Conference on Graph Theory “Rytro '18”, Krakov, Poljska, september 2018.
- G2. *Efficient open domination of digraph products*, 31st Ljubljana - Leoben Graph Theory Seminar, Leoben, Avstrija, september 2018.
- G3. *Open packing number of graph products*, 27th Workshop “3in1”, Stryszawa, Poljska, november 2018.
- I1. 6 recenzij za MathSciNet.
- I2. 5 recenzij za Zentralblatt MATH.

Ciril Petr:

- A1. A. M. Hinz., S. Klavžar, — , *The Tower of Hanoi - Myths and Maths*. 2nd ed., Birkhäuser, Cham, Švica, 2018.
- G1. *Primerjava odprtokodnih podatkovnih mrež*, 23. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2018.
- H1. B. Štok, — , A. Krajnc, *Primerjava odprtokodnih podatkovnih mrež*, 23. konferenca sodobne informacijske tehnologije in storitve, Maribor, junij 2018, OTS 2018: zbornik triindvajsete konference, 164–174.

Lucijan Plevnik:

- A1. — , P. Šemrl, *Automorphisms of effect algebras*, poglavje v *Operator theory, analysis and the state space approach : in honor of Rien Kaashoek (Operator Theory: Advances and Applications, 271)*, str. 361-387, Birkhäuser, Basel, Švica, 2018.
- C1. I. A. Kodeli, — , *Nuclear data adjustment exercise combining information from shielding, critical and kinetics benchmark experiments ASPIS-Iron 88, Popsy and SNEAK-7A/7B*, Prog. Nucl. Energy **106** (2018), 15-230.

Gregor Podlogar:

- A1. *Invariante matrik in identitete s sledmi*, magistrsko delo, Univerza v Ljubljani, Fakulteta za matematiko in fiziko, Oddelek za matematiko, Ljubljana, 2018.

Janez Povh:

- C1. J. Bučar, M. Žnidaršič, — , *Annotated news corpora and a lexicon for sentiment analysis in Slovene*, Lang. Resour. Eval. **52** (2018), 895-919.
- C2. A. Kastrin, J. Klisara, B. Lužar, — , *Is science driven by principal investigators?*, Scientometrics **117** (2018), 1157-1182.
- C3. I. Klep, — , J. Volčič, *Minimizer extraction in polynomial optimization is robust*, SIAM J. Optim. **28** (2018), 3177-3207.
- G1. *BigBin - a high performance solver for hard optimisation problems*, Austrian HPC Meeting, Linz, Avstrija, februar 2018.
- G2. *High-performance computing in combinatorial optimization*, PRACE scientific & industrial conference, Ljubljana, maj 2018.
- G3. *INNOHPC - DANUBE Interreg project*, PRACE scientific & industrial conference, Ljubljana, maj 2018.
- G4. *Extracting optimisers by non-commutative GNS construction is robust*, 23rd International Symposium on Mathematical Programming, Bordeaux, Francija, julij 2018.
- G5. *High-performance solver for binary quadratic problems*, 23rd International Symposium on Mathematical Programming, Bordeaux, Francija, julij 2018.

G6. *On solving the symmetric non-negative matrix tri-factorization problem*, 8th VOCAL Optimization Conference: Advanced Algorithms, Esztergom, Madžarska, december 2018.

I1. Mentorstvo pri enem magistrskem delu.

Jasna Prezelj Perman:

E1. Predsednica organizacijskega odbora konference *Stein manifolds and holomorphic mappings*, Ljubljana, september 2018.

E2. Članica znanstvenega odbora konference *CSASC 18 - Joint Meeting of the Czech, Slovenian, Austrian, Slovak and Catalan Mathematical Societies*, Bratislava, Slovaška, september 2018.

F1. *An introduction to the Oka-Grauert Principle*, vabljeno predavanje, Università degli Studi di Firenze, Italija, januar 2018.

I1. Del tečaja na magistrskem (24 ur) in tečaj na doktorskem študiju (19 ur) na Univerzi v Firencah.

I2. Matematični adventni koledar, zbirka nalog na <http://advent.famnit.upr.si/>.

Nataša Pržulj:

C1. N. Malod-Dognin, J. Petschnigg, — , *Precision medicine - A promising, yet challenging road lies ahead*, Curr. Opin. Syst. Biol. **7** (2018), 1–7.

C2. T. Gaudalet, N. Malod-Dognin, — , *Higher-order molecular organization as a source of biological function*, Bioinformatics **34** (2018), i944–i953.

C3. S. Kraljević Pavelić, J. Simović Medica, D. Gumbarević, A. Filošević, — , K. Pavelić, *Critical review on zeolite clinoptilolite safety and medical applications in vivo*, Front. Pharmacol. **9** (2018), art. 1350, 15 str.

Vicentiu Radulescu:

C1. G. A. Afrouzi, M. Mirzapour, — , *Variational analysis of anisotropic Schrödinger equations without Ambrosetti-Rabinowitz-type condition*, Z. Angew. Math. Phys. **69** (2018), art. 9, 17 str.

- C2. B. Alleche, — , *Further on set-valued equilibrium problems in the pseudo-monotone case and applications to Browder variational inclusions*, Optim. Lett. **12** (2018), 1789–1810.
- C3. R. Alsaedi, — , *Generalized biharmonic problems with variable exponent and Navier boundary condition*, Two nonlinear days in Urbino, Università degli Studi di Urbino, Italija, julij 2017, Proceedings (Electronic Journal of Differential Equations, 2018), 27–37.
- C4. A. Bahrouni, — , *On a new fractional Sobolev space and applications to nonlocal variational problems with variable exponent*, Discrete Contin. Dyn. Syst. Ser. S **11** (2018), 379–389.
- C5. A. Bahrouni, H. Ounaies, — , *Compactly supported solutions of Schrödinger equations with small perturbation*, Appl. Math. Lett. **84** (2018), 148–154.
- C6. A. Bahrouni, — , D. Repovš, *A weighted anisotropic variant of the Caffarelli-Kohn-Nirenberg inequality and applications*, Nonlinearity **31** (2018), 1516–1534.
- C7. J. Giacomoni, — , G. Warnault, *Quasilinear parabolic problem with variable exponent: qualitative analysis and stabilization*, Commun. Contemp. Math. **20** (2018), art. 1750065, 27 str.
- C8. K. Kefi, — , *Small perturbations of nonlocal biharmonic problems with variable exponent and competing nonlinearities*, Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur. Rend. Lincei (9) Mat. Appl. **29** (2018), 439–463.
- C9. G. Li, — , D. Repovš, *Nonhomogeneous Dirichlet problems without the Ambrosetti-Rabinowitz condition*, Topol. Methods Nonlinear Anal. **51** (2018), 55–77.
- C10. M. Marin, — , *A variational approach for the mixed problem in the elastostatics of bodies with dipolar structure*, Mediterr. J. Math **15** (2018), art. 221, 12 str.
- C11. M. Mingqi, — , B. Zhang, *Nonlocal Kirchhoff diffusion problems: local existence and blow-up of solutions*, Nonlinearity **31** (2018), 3228–3250.
- C12. N. S. Papageorgiou, — , *Multiplicity of solutions for Robin problems with double resonance*, Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) **18** (2018), 145–201.
- C13. N. S. Papageorgiou, — , *Semilinear Robin problems resonant at both zero and infinity*, Forum Math. **30** (2018), 237–251.
- C14. N. S. Papageorgiou, — , *Multiplicity of solutions for nonlinear non-homogeneous Robin problems*, Proc. Amer. Math. Soc. **146** (2018), 601–611.
- C15. N. S. Papageorgiou, — , *Multivalued periodic systems with maximal*

- monotone terms*, Pure Appl. Funct. Anal. **3** (2018), 179–192.
- C16. P. Pucci, — , *The maximum principle with lack of monotonicity*, Electron. J. Qual. Theory Differ. Equ. **2018** (2018), art. 58, 11 str.
- C17. — , S. Saiedinezhad, *A nonlinear eigenvalue problem with $p(x)$ -growth and generalized Robin boundary value condition*, Commun. Pure Appl. Anal. **17** (2018), 39–52.
- C18. Q. Zhang, — , *Double phase anisotropic variational problems and combined effects of reaction and absorption terms*, J. Math. Pures Appl. (9) **118** (2018), 159–203.
- D1. Član uredniškega odbora knjižne serije *De Gruyter Series in Nonlinear Analysis and Applications*, Walter de Gruyter, Berlin, Nemčija.
- D2. Član uredniškega odbora knjižne serije *Mathematics in Science and Engineering*, Elsevier, New York, ZDA.
- D3. Glavni urednik revije *Advances in Nonlinear Analysis*.
- D4. Član uredniškega odbora revije *Complex Variables and Elliptic Equations*.
- D5. Član uredniškega odbora revije *Journal of Mathematical Analysis and Applications*.
- D6. Član uredniškega odbora revije *Mathematical Methods in the Applied Sciences*.
- D7. Glavni urednik revije *Nonlinear Analysis. Theory, Methods & Applications*.
- F1. *Small and high perturbations of nonhomogeneous elliptic problems*, vabljeno predavanje, Two Nonlinear Days in Perugia, Perugia, Italija, januar 2018.
- F2. *Equilibria and variational analysis of some classes of inequality problems*, vabljeno predavanje, Conference on Mathematical Sciences and Applications, Riad, Saudova Arabija, april 2018.
- F3. *Nonstandard phenomena in nonlinear elliptic equations*, vabljeno predavanje, International Conference on Modeling and Scientific Computing in Mathematical Engineering, Marakeš, Maroko, november 2018.
- F4. *Singular phenomena in nonlinear elliptic equations*, vabljeno predavanje, Workshop on Nonlinear Analysis and Applications, Hunan, Kitajska, december 2018.
- F5. *Two classical results with lack of monotonicity*, vabljeno predavanje, Workshop on Nonlinear Analysis and Applications, Changsha, Kitajska, december 2018.
- F6. *Nonlinear eigenvalue problems: old and new*, vabljeno predavanje, International Workshop on Nonlinear Analysis and Its Applications, Har-

bin, Kitajska, december 2018.

- F7. *Alcuni modelli matematici nelle scienze applicate: singolarità, frattali e fluidi non-newtoniani*, vabljeno predavanje, Accademia delle Scienze dell'Umbria, Perugia, Italija, januar 2018.
- F8. *Nonstandard phenomena in nonlinear elliptic PDEs*, vabljeno predavanje, Matematiska institutionen, Stockholms universitet, Stockholm, Švedska, februar 2018.
- F9. *Anisotropic double phase problems and perspectives*, vabljeno predavanje, Wydział Matematyki Stosowanej AGH, Akademia Górniczo-Hutnicza im. Stanisława Staszica, Krakov, Poljska, oktober 2018.
- F10. *Anisotropic double phase problems and perspectives*, vabljeno predavanje, Harbin Institute of Technology, Harbin, Kitajska, december 2018.
- F11. *Nonlinear eigenvalue problems: old and new*, vabljeno predavanje, Chongqing Technology and Business University, Chongqing, Kitajska, december 2018.
- F12. *Singular phenomena in nonlinear elliptic equations*, vabljeno predavanje, Harbin Engineering University, Harbin, Kitajska, december 2018.
- F13. *Some mathematical models in applied sciences: singularities, fractals and non-Newtonian fluids*, vabljeno predavanje, Heilongjiang Institute of Technology, Heilongjiang, Kitajska, december 2018.
- F14. *Two classical results with lack of monotonicity*, vabljeno predavanje, Chinese Academy of Sciences, Peking, Kitajska, december 2018.

Martin Raič:

- B1. *A multivariate Berry–Esséen theorem with explicit constants*, sprejeto v objavo v Bernoulli.
- G1. *A central limit theorem in high dimensions*, 12th International Vilnius Conference on Probability Theory and Mathematical Statistics and 2018 IMS Annual Meeting on Probability and Statistics, Vilna, Litva, julij 2018.
- I1. Mentorstvo pri eni zaključni nalogi.
- I2. Ena recenzija za revijo “Obzornik za matematiko in fiziko”.

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- C1. —, J. Žerovnik, *Formulas for various domination numbers of products of paths and cycles*, *Ars Combin* **137** (2018), 177-202.

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- C2. A. Bahrouni, — , *Existence and nonexistence of solutions for $p(x)$ -curl systems arising in electromagnetism*, Complex Var. Elliptic Equ. **63** (2018), 292–301.
- C3. M. Galewski, — , *Global invertibility of mappings between Banach spaces and applications to nonlinear equations*, Two nonlinear days in Urbino, Urbino, Italija, julij 2017, Proceedings (Electronic Journal of Differential Equations, 2018), 87-102.
- C4. D. Garity, — , D. Wright, *Contractible 3-manifolds and the double 3-space property*, Trans. Amer. Math. Soc. **370** (2018), 2039-2055.
- C5. F. Hegenbarth, — , *The relationship of generalized manifolds to Poincaré duality complexes and topological manifolds*, Topology Appl. **239** (2018), 126–141.
- C6. S. Liang, — , B. Zhang, *On the fractional Schrödinger-Kirchhoff equations with electromagnetic fields and critical nonlinearity*, Comput. Math. Appl. **75** (2018), 1778–1794.
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- C8. N. S. Papageorgiou, V. Rădulescu, — , *$(p, 2)$ -equations asymmetric at both zero and infinity*, Adv. Nonlinear Anal. **7** (2018), 327–351.
- C9. N. S. Papageorgiou, V. Rădulescu, — , *Resonant Robin problems driven by the p -Laplacian plus an indefinite potential*, Ann. Acad. Sci. Fenn. Math. **43** (2018), 483–508.
- C10. N. S. Papageorgiou, V. Rădulescu, — , *Nonlinear elliptic inclusions with unilateral constraint and dependence on the gradient*, Appl. Math. Optim. **78** (2018), 1–23.
- C11. N. S. Papageorgiou, V. Rădulescu, — , *Positive solutions for superdiffusive mixed problems*, Appl. Math. Lett. **77** (2018), 87–93.
- C12. N. S. Papageorgiou, V. Rădulescu, — , *Positive solutions for nonvariational Robin problems*, Asymptot. Anal. **108** (2018), 243–255.
- C13. N. S. Papageorgiou, V. Rădulescu, — , *Nodal solutions for nonlinear nonhomogeneous Robin problems*, Atti Accad. Naz. Lincei Cl. Sci. Fis. Mat. Natur. Rend. Lincei (9) Mat. Appl. **29** (2018), 721–738.

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- 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*.
- E1. Član organizacijskega odbora konference *Conference on Mathematical Sciences and Applications*, Riyadh, Saudova Arabija, april 2018.
- E2. Član organizacijskega odbora konference *Recent Advances in Nonlinear Analysis*, Levico Terme, Italija, maj 2018.
- F1. *Vicentiu Rădulescu: Some key facts about his life and professional career*, vabljeno predavanje, Recent Advances in Nonlinear Analysis, on the occasion of Vicentiu Rădulescu 60th anniversary, Levico Terme, Italija, maj 2018.
- I1. Prejemnik priznanja *Zlata plaketa* Univerze v Ljubljani.
- I2. Izbran v ARRS projekt *Odlični v znanosti 2018*.

Pavle Saksida:

- C1. *Nonlinear Fourier transform - towards the construction of nonlinear Fourier modes*, J. Phys. A. **51** (2018), art. 015205, 31 str.

- C2. A. Hladnik, — , *Compressed sensing and some image processing applications*, 9th International Symposium on Graphic Engineering and Design, Novi Sad, Srbija, november 2018, Proceedings, 567–572.
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- G2. *Compressed sensing and some image processing applications*, 9th International Symposium on Graphic Engineering and Design, Novi Sad, Srbija, november 2018.
- I1. Mentorstvo pri enem delu diplomskega seminarja.

Raffaella Servadei:

- C1. G. M. Figueiredo, G. Molica Bisci, — , *The effect of the domain topology on the number of solutions of fractional Laplace problems*, Calc. Var. Partial Differential Equations **57** (2018), art. 103, 24 str.
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- I1. Mentorstvo pri 3 magistrskih in 6 diplomskih delih.

Tadej Starčič:

- C1. M. Slapar, — , *On normal forms of complex points of codimension 2 submanifolds*, J. Math. Anal. Appl. **461** (2018), 1308–1326.
- C2. *On regular Stein neighborhoods of a union of two maximally totally real subspaces in \mathbb{C}^n* , Period. Math. Hungar. **77** (2018), 139–163.
- I1. Somentorstvo pri 2 magistrskih ter 3 diplomskih delih in pri eni osnovnošolski raziskovalni nalogi .

Nik Stopar:

- B1. A. Đurić, S. Jevđenić, P. Oblak, — , *The total zero-divisor graph of commutative rings*, sprejeto v objavo v J. Algebra Appl.
- C1. G. Dolinar, B. Kuzma, — , *Characterization of orthomaps on the Cayley plane*, Aequationes Math. **92** (2018), 243–265.
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- G1. *Matematično predznanje študentov elektrotehnike* , 4. mednarodna konferenca o učenju in poučevanju matematike, Laško, junij 2018.
- G2. *Singapurski sistem izobraževanja* , 4. mednarodna konferenca o učenju in poučevanju matematike, Laško, junij 2018.

Sašo Strle:

- G1. *On the Thom conjecture in $\mathbb{C}P^3$* , 25 Years of Topology Seminar in Split - Scientific Meeting, Split, Hrvaška, junij 2018.
- I1. Odgovorni in področni urednik revije *Obzornik za matematiko in fiziko*.

Gregor Šega:

- H1. *Petindvajseto mednarodno tekmovanje študentov matematike*, Obzornik Mat. Fiz. **65** (2018), 110–116.
- I1. Mentorstvo pri enem delu diplomskega seminarja.

Peter Šemrl:

- A1. L. Plevnik, — , *Automorphisms of effect algebras*, poglavje v *Operator theory, analysis and the state space approach : in honor of Rien Kaashoek (Operator Theory: Advances and Applications, 271)*, str. 361-387, Birkhäuser, Basel, Švica, 2018.
- B1. M. Brešar, — , *Continuous commuting functions on matrix algebras*, sprejeto v objavo v *Linear Algebra Appl.*
- B2. M. Brešar, — , *Zero product preserving maps on matrix rings over division rings*, sprejeto v objavo v *Contemp. Math.*
- C1. *Groups of order automorphisms of operator intervals*, *Acta Sci. Math. (Szeged)* **84** (2018), 125–136.
- C2. G. P. Gehér, — , *Isometries of Grassmann spaces, II*, *Adv. Math.* **332** (2018), 287–310.
- C3. C. de Seguins Pazzis, — , *Continuous space-time transformations*, *Adv. Geom.* **18** (2018), 385–393.
- D1. Glavni urednik revije *Linear Algebra and its Applications*.
- D2. Član uredniškega odbora revije *Linear and Multilinear Algebra*.
- D3. Član uredniškega odbora revije *Operators and Matrices*.
- D4. Član uredniškega odbora revije *Obzornik za matematiko in fiziko*.
- F1. *Isometries of Grassmann spaces*, kolokvijsko predavanje, New York University Abu Dhabi, Abu Dhabi, Združeni Arabski Emirati, februar 2018.
- F2. *Isometries of Grassmann spaces*, plenarno predavanje, International Conference on Algebra and Related Topics, Rabat, Maroko, julij 2018.
- F3. *Isometries of Grassmann spaces*, plenarno predavanje, Workshop on Matrices and Operators, Šanghaj, Kitajska, julij 2018.
- F4. *Löwner order on self-adjoint matrices and operators*, vabljeno predavanje, Bolyai Institute, Szeged, Madžarska, november 2018.
- F5. *Isometries of Grassmann spaces*, plenarno predavanje, Recent Advances in Operator Theory and Operator Algebras, OTOA 2018, Bangalore, Indija, december 2018.
- G1. *Isometries of Grassmann spaces*, International Workshop on Operator Theory and its Applications, IWOTA 2018, Šanghaj, Kitajska, julij 2018.
- I1. Predsednik International Linear Algebra Society.

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Klemen Šivic:

C1. J. Bernik, — , *On certain graded representations of filiform Lie algebras*, Linear Multilinear Algebra **66** (2018), 2305–2327.

Riste Škrekovski:

- B1. D. Dimitrov, B. Ilica, — , *Maximum external Wiener index of graphs*, sprejeto v objavo v Discrete Appl. Math.
- C1. P. Gregor, — , V. Vukašinić, *Modelling simultaneous broadcasting by level-disjoint partitions*, Appl. Math. Comput. **325** (2018), 15–23.
- C2. M. Knor, S. Majstorović, — , *Graphs preserving Wiener index upon vertex removal*, Appl. Math. Comput. **338** (2018), 25–32.
- C3. K. Hriňáková, M. Knor, — , *On a conjecture about the ratio of Wiener index in iterated line graphs*, Art Dis. Appl. Math. **1** (2018), 1–9.
- C4. I. Martinjak, — , *Lah numbers and Lindström's lemma*, C. R. Math. Acad. Sci. Paris **356** (2018), 5–7.
- C5. V. Andova, B. Lidický, B. Lužar, — , *On facial unique-maximum (edge)-coloring*, Discrete Appl. Math. **237** (2018), 26–32.
- C6. M. Knor, S. Majstorović, — , *Graphs whose Wiener index does not change when a specific vertex is removed*, Discrete Appl. Math. **238** (2018), 126–132.
- C7. P. Gregor, T. Novotný, — , *Extending perfect matchings to Gray codes with prescribed ends*, Electron. J. Combin. **25** (2018), art. P2.56, 18 str.
- C8. P. Gregor, — , V. Vukašinić, *Broadcasting multiple messages in the 1-in port model in optimal time*, J. Comb. Optim. **36** (2018), 1333–1355.
- C9. B. Lužar, M. Petruševski, — , *On vertex-parity edge-colorings*, J. Comb. Optim. **35** (2018), 373–388.
- C10. V. Andova, M. Knor, — , *Distance based indices in nanotubical graphs: part 1*, J. Math. Chem. **56** (2018), 2801–2815.
- C11. T. Došlić, I. Martinjak, — , S. Tipurić Spužević, I. Zubac, *Mostar index*, J. Math. Chem. **56** (2018), 2995–3013.
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- C14. N. Bašić, I. Estélyi, — , N. Tratnik, *On the Clar number of benzenoid graphs*, MATCH Commun. Math. Comput. Chem. **80** (2018), 173–188.
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- D3. Član uredniškega odbora revije *The art of discrete and applied mathematics*.
- F1. *Some results on unique-maximum coloring of plane graphs*, vabljeno predavanje, Sveučilište u Osijeku, Hrvaska, februar 2018.
- F2. *Some results on unique-maximum coloring of plane graphs*, seminarsko predavanje, Prirodoslovno-matematički fakultet, Sveučilište u Zagrebu, Hrvaska, april 2018.
- F3. *Closeness and eccentricity centralization measures for two-mode data of prescribed sizes*, vabljeno predavanje, Iowa State University, Ames, ZDA, junij 2018.
- F4. *Closeness and eccentricity centralization measures for two-mode data of prescribed sizes*, vabljeno predavanje, New York Combinatorics Seminar, Graduate Center's Math Department and Computer Science Department, New York, ZDA, junij 2018.
- F5. *Some results on unique-maximum coloring of plane graphs*, plenarno predavanje, International Symposium on Graph Theory, Combinatorics and Theoretical Chemistry, Kunming, Kitajska, julij 2018.
- F6. *Some results on unique-maximum coloring of plane graphs*, vabljeno predavanje, 2nd Croatian Combinatorial Days, Zagreb, Hrvaska, september 2018.
- F7. *Some results and problems on unique-maximum colorings of plane graphs*, seminarsko predavanje, Prírodovedecká fakulta UPJŠ, Košicie, Slovaška, november 2018.
- F8. *Some results and problems on unique-maximum colorings of plane graphs*, vabljeno predavanje, Université Paris Diderot, Pariz, Francija, december 2018.

- G1. *Mathematical aspects of Balaban index*, XIV. Serbian Mathematical Congress, Kragujevac, Srbija, maj 2018.
 - G2. *Graphs preserving total distance upon vertex removal*, Discrete Mathematics Days, Sevilja, Španija, junij 2018.
 - G3. *On vertex-parity edge-coloring*, 6th Gdańsk Workshop on Graph Theory, Gdansk, Poljska, julij 2018.
 - G4. *Some results on unique-maximum coloring of plane graphs*, 3rd Macedonian Workshop on Graph Theory and Applications, Ohrid, Makedonija, avgust 2018.
 - G5. *On unique maximal colorings*, 1st Montenegrin Symposium on Graphs, Informatics and Algebra, Tivat, Črna Gora, september 2018.
- I1. Soavtor enega univerzitetnega učbenika.

Simon Špacapan:

- C1. *The diameter of strong orientations of Cartesian products of graphs*, Discrete Appl. Math. **247** (2018), 116–121.
- I1. Ena recenzija za MathSciNet.
- I2. Soavtor enega univerzitetnega učnega gradiva.
- I3. Mentorstvo pri eni doktorski disertaciji.
- I4. Pisec recenzij za reviji European “Journal of Combinatorics” in “Journal of Combinatorial Theory. Series B”.

Primož Šparl:

- B1. K. Kutnar, D. Marušič, Štefko Miklavič, — , *The classification of 2-extendable edge-regular graphs with diameter 2*, sprejeto v objavo v Electron. J. Combin.
 - B2. A. Ramos Rivera, — , *New structural results on tetravalent half-arc-transitive graphs*, sprejeto v objavo v J. Combin. Theory Ser. B.
 - C1. Š. Miklavič, — , *ℓ -distance-balanced graphs*, Discrete Appl. Math. **244** (2018), 143–154.
 - C2. H. Alajbegović, A. Huskanović, Š. Miklavič, — , *On the extendability of quasi-strongly regular graphs with diameter 2*, Graphs Combin. **34** (2018), 711–726.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.

- E1. Član znanstvenega odbora konference konference δ^{th} *PhD Summer School in Discrete Mathematics*, Rogla, Slovenija, julij 2018.
- F1. *On structural results of tetravalent half-arc-transitive graphs*, vabljenopredavanje, International Workshop on Symmetries of Graph and Networks, Sanya, Kitajska, januar/februar 2018.
- F2. *Symmetry properties of generalized graph truncations*, vabljenopredavanje, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.
- F3. *Some recent results on half-arc-transitivity of graphs*, vabljenopredavanje, 8th PhD Summer School in Discrete Mathematics, Rogla, julij 2018.
- G1. *Distance balancedness of graphs*, 31st Ljubljana - Leoben Graph Theory Seminar, Leoben, Avstrija, september 2018.
- I1. Avtor 2 univerzitetnih učnih gradiv.
- I2. Mentorstvo pri 3 magistrskih delih.

Janez Šter:

- C1. *On expressing matrices over \mathbb{Z}_2 as the sum of an idempotent and a nilpotent*, Linear Algebra Appl. **544** (2018), 339-349.
- C2. P. P. Nielsen, —, *Connections between unit-regularity, regularity, cleanliness, and strong cleanness of elements and rings*, Trans. Amer. Math. Soc. **370** (2018), 1759–1782.
- C3. G. Nicollier, A. Peperko,—, *Pythagorean theorem: a proof without words*, Math. Mag. **91** (2018), 382–383.

Andrej Taranenko:

- C1. I. Peterin, J. Schreyer, E. Fecková Škrabul'áková,—, *A note on the Thue chromatic number of lexicographic products of graphs*, Discuss. Math. Graph Theory **38** (2018), 635–643.
- H1. *Grayeve kode*, Presek **45** (2018), št. 6, 25–27.
- I1. Ena recenzija za MathSciNet.
- I2. Mentorstvo pri enem magistrskem delu.

Niko Tratnik:

- B1. — , P. Žigert Pleteršek, *The edge-Hosoya polynomial of benzenoid chains*, sprejeto v objavo v J. Math. Chem.
- B2. *Formula for calculating the Wiener polarity index with applications to benzenoid graphs and phenylenes*, sprejeto v objavo v J. Math. Chem.
- C1. *A method for computing the edge-hyper-Wiener index of partial cubes and an algorithm for benzenoid systems*, Appl. Anal. Discrete Math **12** (2018), 126–142.
- C2. *On the Steiner hyper-Wiener index of a graph*, Appl. Math. Comput. **337** (2018), 360–371.
- C3. T. Došlić, — , P. Žigert Pleteršek, *Saturation number of lattice animals*, Ars Math. Contemp. **15** (2018), 191–204.
- C4. *The Wiener polarity index of benzenoid systems and nanotubes*, Croat. Chem. Acta **91** (2018), 1–7.
- C5. A. Kelenc, — , I. G. Yero, *Uniquely identifying the edges of a graph: the edge metric dimension*, Discrete Appl. Math. **251** (2018), 204–220.
- C6. M. Črepnjak, — , P. Žigert Pleteršek, *Predicting melting points of hydrocarbons by the Graovac-Pisanski index*, Fuller. Nanotub. Carbon Nanostructures **26** (2018), 239–245.
- C7. — , P. Žigert Pleteršek, *The Graovac-Pisanski index of armchair tubulenes*, J. Math. Chem. **56** (2018), 1103–1116.
- C8. N. Bašić, I. Estélyi, R. Škrekovski, — , *On the Clar number of benzenoid graphs*, MATCH Commun. Math. Comput. Chem. **80** (2018), 173–188.
- G1. *Some distance-based topological indices of partial cubes*, 2nd Croatian Combinatorial Days, Zagreb, Hrvaška, september 2018.
- H1. — , P. Žigert Pleteršek, *Kemijska teorija grafov in resonančni grafi*, Dianoia **2** (2018), 59–65.
- I1. 5 recenzij za MathSciNet.
- I2. Ena recenzija za Zentralblatt MATH.
- I3. Somentorstvo pri enem magistrskem delu.
- I4. Pisec recenzij za revije: “Ars Mathematica Contemporanea”, “Quasigroups and Related Systems”, “Discrete Applied Mathematics” in “MATCH - Communications in Mathematical and in Computer Chemistry”.

Riccardo Ugolini:

- B1. R. B. Andrist, — , *A new notion of tameness*, sprejeto v objavo v J. Math. Anal. Appl.
- F1. *A new notion of tameness*, seminarsko predavanje, Università degli Studi di Roma Tor Vergata, Rim, Italija, januar 2018.
- F2. *Tame sets in Stein manifolds*, seminarsko predavanje, Boğaziçi Üniversitesi (Bosphorus University), Carigrad, Turčija, maj 2018.
- F3. *Tame sets in Stein manifolds*, seminarsko predavanje, Bergische Universität Wuppertal, Nemčija, maj 2018.
- G1. *A new notion of tameness*, Informal Geometry workshop in “Paradiso”, Cogne, Italija, februar 2018.
- G2. *Tame sets in Stein manifolds*, 2nd Central European Complex Analysis Meeting, Dunaj, Avstrija, april 2018.
- G3. *Andersen-Lempert theory and tame sets*, Progressi Recenti in Geometria Reale e Complessa-XI, Levico Terme (Trento), Italija, september 2018.

Aljaž Ule:

- A1. A. Živoder, — , *Poskus*, poglavje v *Zasebno je politično: kritične teorije vsakdanjega življenja*, str. 162–177, Fakulteta za družbene vede, Ljubljana, 2018.
- C1. — , A. Živoder, *Uporaba eksperimentalne ekonomije za oceno omejene finančne racionalnosti*, Teor. Praksa **55** (2018), 27–40, 221.
- D1. Član uredniškega odbora revije *Serbian Journal of Management*.

Aleš Vavpetič:

- B1. M. Kandić, — , *Topological aspects of order in $C(X)$* , sprejeto v objavo v Positivity.
- B2. L. Lampret, — , *Torsion table for the Lie algebra \mathfrak{nil}_n* , sprejeto v objavo v Comm. Algebra.
- B3. — , E. Žagar, *A general framework for the optimal approximation of circular arcs by parametric polynomial curves*, sprejeto v objavo v J. Comput. Appl. Math.

- C1. M. Kandić, — , *The countable sup property for lattices of continuous functions*, J. Math. Anal. Appl. **465** (2018), 588–603.
- C2. M. Cencelj, J. Dydak, — , *Asymptotic dimension of coarse spaces via maps to simplicial complexes*, Topology Appl. **239** (2018), 226–233.
- G1. *A Remes type algorithm for geometric approximation of a circular arc*, Czech-Slovak Conference on Geometry and Graphics, Blansko, Češka, september 2018.
- II. Mentorstvo pri enem magistrskem, enem diplomskem in 2 delih diplomskega seminarja.

Aleksander Vesel:

- B1. D. Korže, Ž. Markuš, — , *A heuristic approach for searching (d, n) -packing colorings of infinite lattices*, sprejeto v objavo v Discrete Appl. Math.
- C1. D. Korže, — , *(d, n) -packing colorings of infinite lattices*, Discrete Appl. Math. **237** (2018), 97–108.
- C2. Z. Shao, H. Jiang, — , *$L(2, 1)$ -labeling of the cartesian and strong product of two directed cycles*, Math. Found. Comput. **1** (2018), 49–61.
- H1. *Še o generiranju permutacij*, Presek **46** (2018/2019), št. 1, 27–30.
- II. 5 recenzij za MathSciNet.
- II. Ena recenzija za Zentralblatt MATH.

Janoš Vidali:

- B1. A. Jurišić, — , *The Sylvester graph and Moore graphs*, sprejeto v objavo v European J. Combin.
- C1. *Using symbolic computation to prove nonexistence of distance-regular graphs*, Electron. J. Combin. **25** (2018), art. P4.21, 10 str.
- C2. K. Berčič, — , *DiscreteZOO: towards a fingerprint database of discrete objects*, 6th International Conference on Mathematical Software, South Bend, ZDA, julij 2018, Proceedings (Lecture notes in computer science, 10931), 36–44.
- F1. *DiscreteZOO – A repository of graphs and other discrete objects*, vabljeno predavanje, Software tools for mathematics, Morelia, Mehika, januar 2018.

- F2. *DiscreteZOO – a repository of combinatorial objects and its companion Sage package*, vabljeno predavanje, Software tools for mathematics, Koper, Slovenija, september 2018.
- G1. *Triple intersection numbers of metric and cometric association schemes*, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.
- II. Somentorstvo pri enem diplomskem delu.

Matija Vidmar:

- B1. *Independence times for iid sequences, random walks and Lévy processes*, sprejeto v objavo v Stochastic Process. Appl.
- C1. *Fluctuation theory for upwards skip-free Lévy chains*, Risks **6** (2018), art. 102, 24 str.
- C2. *Ruin under stochastic dependence between premium and claim arrivals*, Scand. Actuar. J. **2018** (2018), 505–513.
- C3. *A couple of remarks on the convergence of σ -fields on probability spaces*, Statist. Probab. Lett. **134** (2018), 86–92.
- C4. *Another characterization of homogeneous Poisson processes*, Stochastics **90** (2018), 876–885.

Žiga Virk:

- B1. *1-dimensional intrinsic persistence of geodesic spaces*, sprejeto v objavo v J. Topol. Anal.
- C1. H. Edelsbrunner, —, H. Wagner, *Smallest enclosing spheres and Chernoff points in Bregman geometry*, 34th International Symposium on Computational Geometry, Budimpešta, Madžarska, junij 2018, Proceedings (Leibniz international proceedings in informatics, 99), 13 str.
- F1. *Persistence of geodesic spaces*, vabljeno predavanje, CIMAT, Centro de Investigación en Matemáticas A.C., Guanojuato, Mehika, september 2018.
- G1. *Comparing topologies on the universal path space*, Arches Topology Conference, In honor of Katsuya Eda's career and contributions, Moab, ZDA, maj 2018.

- G2. *Smallest enclosing spheres and Chernoff points in Bregman geometry*, 34th International Symposium on Computational Geometry, Budimpešta, Madžarska, junij 2018.
- G3. *Persistence of geodesic spaces*, 7th Annual Minisymposium on Computational Topology, Budimpešta, Madžarska, junij 2018.
- G4. *Persistence of geodesic spaces*, ATMCS8, Applied Topology: Methods, Computation and Science, Klosterneuburg, Avstrija, junij 2018.
- G5. *Persistence of geodesic spaces*, Geometric and Topological Methods in Computer Science (GETCO), Oaxaca, Mehika, september 2018.
- H1. *Pravokotniki na krivulji*, Obzornik Mat. Fiz. **65** (2018), 81–88.
- I1. 4 recenzije za Zentralblatt MATH.
- I2. Mentorstvo pri enem magistrskem delu.

Vito Vitrih:

- C1. M. Kapl, — , *Dimension and basis construction for C^2 -smooth isogeometric spline spaces over bilinear-like G^2 two-patch parameterizations*, J. Comput. Appl. Math. **335** (2018), 289-311.
- D1. Urednik revije *The Art of Discrete and Applied Mathematics*.
- D2. Tehnični urednik revije *Ars Mathematica Contemporanea*.
- G1. *Construction of C^2 -smooth isogeometric spline spaces for planar multi-patch geometries*, 9th international conference Curves and Surfaces, Archon, Francija, 2018.
- I1. Mentorstvo pri eni zaključni nalogi.

Andrej Vodopivec:

- C1. M. Kotrbčič, N. Matsumoto, B. Mohar, A. Nakamoto, K. Noguchi, K. Ozeki, — , *Grünbaum colorings of even triangulations on surfaces*, J. Graph Theory **87** (2018), 475–491.

Aljaž Zalar:

- C1. A. Bhardwaj, — , *The singular bivariate quartic tracial moment problem*, Complex Anal. Oper. Theory **12** (2018), 1057–1142.

Lyubomyr Zdomskyy:

- C1. *Products of Menger spaces in the Miller model*, Adv. Math. **335** (2018), 170–179.
- C2. L. F. Aurichi, — , *Internal characterizations of productively Lindelöf spaces*, Proc. Amer. Math. Soc. **146** (2018), 3615–3626.
- C3. A. Medini, J. van Mill, — , *Infinite powers and Cohen reals*, Canad. Math. Bull. **61** (2018), 812–821.
- C4. D. Repovš, — , *Products of H -separable spaces in the Laver model*, Topology Appl. **239** (2018), 115–119.
- F1. *Combinatorial properties of open covers, dense sets, and forcing*, vabljeno predavanje, 33rd Summer Conference on Topology and its Applications, Western Kentucky University, Bowling Green, ZDA, julij 2018.
- G1. *Hereditarily Baire hyperspaces*, Research Workshop of the Israel Science Foundation, “Set Theory, Model Theory and Applications” , Ben-Gurion University of the Negev, Izrael, april 2018.
- G2. *Basics of proper forcing, with emphases on posets consisting of trees 1*, Summer School “Analysis, Topology and Applications”, Vižnicja, Ukrajina, julij/avgust 2018.
- G3. *Basics of proper forcing, with emphases on posets consisting of trees 2*, Summer School “Analysis, Topology and Applications”, Vižnicja, Ukrajina, julij/avgust 2018.
- G4. *A gentle introduction to forcing 1*, Summer School “Analysis, Topology and Applications”, Vižnicja, Ukrajina, julij/avgust 2018.
- G5. *A gentle introduction to forcing 2*, Summer School “Analysis, Topology and Applications”, Vižnicja, Ukrajina, julij/avgust 2018.

Sara Sabrina Zemljčič:

- C1. S. Klavžar, — , *Connectivity and some other properties of generalized Sierpiński graphs*, Appl. Anal. Discrete Math. **12** (2018), 401–412.
- G1. *Sierpiński product of graphs*, Trojkrál’ová konferencia: stretnutie mladých českých a slovenských fyzikov a matematikov, Košice, Slovaška, januar 2018.
- G2. *On upper bounds for the order of cages*, Graphs, groups, and more: celebrating Brian Alspach’s 80th and Dragan Marušič’s 65th birthdays, Koper, maj/junij 2018.

- G3. *Distinguishing Sierpiński products of graphs*, Symmetry Breaking in Discrete Structures, Casa Matemática Oaxaca, Mehika, september 2018.

Emil Žagar:

- B1. A. Vavpetič, — , *A general framework for the optimal approximation of circular arcs by parametric polynomial curves*, sprejeto v objavo v J. Comput. Appl. Math.
- C1. M. Knez, — , *Interpolation of circular arcs by parametric polynomials of maximal geometric smoothness*, Comput. Aided Geom. Design **63** (2018), 66–77.
- C2. *Circular sector area preserving approximation of circular arcs by geometrically smooth parametric polynomials*, J. Comput. Appl. Math. **336** (2018), 63–71.
- C3. *Geometric interpolation by cubic Pythagorean-hodograph curves with prescribed length*, Czech-Slovak Conference on Geometry and Graphics, Blansko, Češka, september 2018, Proceedings of the Czech-Slovak Conference on Geometry and Graphics , 21–27.
- F1. *Geometric interpolation by PH curves with prescribed arc length*, vabljeno predavanje, Czech-Slovak Conference on Geometry and Graphics, Blansko, Češka, september 2018.
- I1. Mentorstvo pri eni doktorski disertaciji in 2 magistrskih delih.

Janez Žerovnik:

- A1. D. Kaljun, — , *An alternative model of the spatial light intensity distribution*, poglavje v *Advances in optics: reviews*, str. 121–136, International Frequency Sensor Association – IFSA, Barcelona, Španija, 2018.
- C1. P. Repolusk, — , *Formulas for various domination numbers of products of paths and cycles*, Ars Combin. **137** (2018), 177–202.
- C2. T. Novak, D. Rupnik Poklukar, — , *The Hosoya polynomial of double weighted graphs*, Ars Math. Contemp. **15** (2018), 441–466.
- C3. D. Rupnik Poklukar, — , *The differences among methods for computation of quartiles do matter*, J. Math. Stat. Sci. **4** (2018), 379–388.
- C4. T. Vizinger, — , *Coordination of a retail supply chain distribution flow*, Teh. Vjesn. - Stroj. Fak. **25** (2018), 1298–1305.

- C5. Z. Shao, P. Wu, H. Jiang, Z. Li, — , X. Zhang, *Discharging approach for double Roman domination in graphs*, IEEE Access **6** (2018), 63345–63351.
- C6. H. Zupan, — , N. Herakovič, *Local search with discrete event simulation for the job shop scheduling problem*, International Workshop “Service Orientation in Holonic and Multi-Agent Manufacturing”, Nantes, Francija, oktober 2017, Proceedings of SOHOMA 2017, 371-380.
- 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*.
- G1. *On computation of quartiles - the differences among methods do matter!*, ISCCRO - International Statistical Conference in Croatia, Opatija, Hrvaška, maj 2018.
- G2. *Linear algorithms for domination on cactus graphs*, International Conference on Combinatorial Optimization EURO/ALIO 2018, Bologna, Italija, junij 2018.
- G3. *Neskladja v učbenikih in priprava maturitetnih nalog*, 4. Konferenca o učenju in poučevanju matematike, Laško, junij 2018.
- G4. *Linear algorithms on cactus graphs*, Conference on operational research KOI 2018, Zadar, Hrvaška, september 2018.
- I1. Predsednik Državne predmetne komisije za splošno maturo za matematiko.
- I2. Mentorstvo pri eni diplomski nalogi.
- I3. Recenzija enega univerzitetnega učbenika.

TUJI GOSTI

Oddelek za matematiko je v letu 2018 gostil naslednje tuje goste:

Soodabeh Asadi, 3 tedne, Shahrekord University, Iran, september 2018, na povabilo Janeza Povha,

Katharina Birner, 4 dni, Johannes Kepler Universität, Linz, Avstrija, julij 2018, na povabilo Marjetke Knez,

Christian Budde, 3 tedne, Bergische Universität Wuppertal, Nemčija, april 2018, na povabilo Marjete Kramar Fijavž,

- Cafer Caliskan**, 8 dni, Antalya Bilim University, Antalya, Turčija, maj-junij 2018, na povabilo Štefka Miklaviča,
- Jerzy Dydak**, 4 tedne, University of Tennessee, Knoxville, ZDA, maj/junij 2018, na povabilo Dušana Repovša,
- Fabrizio Durante**, 5 dni, Università del Salento, Lecce, Italija, maj 2018, na povabilo Tomaža Koširja,
- Nicolas Gastineau**, 1 teden, Université de Bourgogne, Dijon, Francija, avgust 2018, na povabilo Boštjana Brešarja,
- Panos Giannopoulos**, 1 teden, Middlesex University, London, Velika Britanija, januar 2018, na povabilo Sergia Cabella,
- Valentin Gledel**, 4 mesece, Université de Lyon, Francija, februar/maj 2018, na povabilo Sandija Klavžarja,
- Jovan Golić**, 2 dni, Telecom Italia, Torino, Italija, december 2018, na povabilo Aleksandra Jurišiča,
- Friedrich Hegenbarth**, 2 meseca, Università degli studi di Milano, Milano, Italija, oktober/november 2018, na povabilo Dušana Repovša,
- Denise Halverson**, 2 meseca, Brigham Young University, Provo, ZDA, maj/junij 2018, na povabilo Dušana Repovša,
- Mike Henning**, 10 dni, University of Johannesburg, Južna Afrika, julij 2018, na povabilo Sandija Klavžarja,
- Philipp Jukic**, 2 meseca, Universität Innsbruck, Avstrija, november 2018, na povabilo Igorja Klepa,
- Bert Juttler**, 3 dni, Johannes Kepler Universität, Linz, Avstrija, julij 2018, na povabilo Marjetke Knez,
- David Kalaj**, 6 dni, Univerzitet Crne Gore, Podgorica, Črna Gora, maj 2018, na povabilo Barbare Drinovec Drnovšek,
- Sara Kališnik Verovšek**, 1 teden, Wesleyan University, Middletown, Connecticut, ZDA, april 2018, na povabilo Dušana Repovša,
- Mario Kapl**, 4 dni, Johannes Kepler Universität, Linz, Avstrija, julij 2018, na povabilo Marjetke Knez,
- Mykola Khrypchenko**, 9 dni, University of Santa Catarina, Florianopolis, Brazilija, januar 2017, na povabilo Ganne Kudryavtseve,
- Kolja Knauer**, 1 teden, Université Aix-Marseille, Marseille, Francija, avgust 2018, na povabilo Sandija Klavžarja,
- Kari Küster**, 4 dni, Eberhard Karls Universität Tübingen, Nemčija, oktober 2018, na povabilo Marjete Kramar Fijavž,
- Vladimir Müller**, 7 dni, Mathematical Institute, Czech Academy of Sciences, Praga, Češka, maj 2018, na povabilo Romana Drnovška,
- Sibel Ozkan**, 8 dni, Gebze Technical University, Istanbul, Turčija, maj-junij 2018, na povabilo Štefka Miklaviča,

James Pascoe, 2 tedna, Washington University of St. Louis, St. Louis, ZDA, avgust 2018, na povabilo Igorja Klepa,
Douglas Rall, 2 tedna, Furman University, Greenville, ZDA, junij, september 2018, na povabilo Sandija Klavžarja,
Douglas Rall, 10 dni, Furman University, Greenville, ZDA, september 2018, na povabilo Boštjana Brešarja,
Annon Rosenmann, 3dni, TU Graz, Gradec, Avstrija, marec 2018, na povabilo Aljoše Peperka,
Sita Siewert, 4 dni, Eberhard Karls Universität Tübingen, Nemčija, oktober 2018, na povabilo Marjete Kramar Fijavž,
Špela Špenko, 2 tedna, Vrije Universiteit Brussel, Bruselj, Belgija, januar/februar 2018, na povabilo Igorja Klepa,
Špela Špenko, 2 tedna, Vrije Universiteit Brussel, Bruselj, Belgija, avgust/september 2018, na povabilo Igorja Klepa,
Thomas Takacs, 4 dni, Johannes Kepler Universität, Linz, Avstrija, julij 2018, na povabilo Marjetke Knez,
Paul Terwilliger, 6 dni, University of Wisconsin – Madison, Madison, ZDA, julij 2018, na povabilo Štefka Miklaviča,
Olivier Togni, 1 teden, Université de Bourgogne, Dijon, Francija, avgust 2018, na povabilo Boštjana Brešarjagost Rafael Torres 3 dni Scuola Internazionale Superiore di Studi Avanzati, SISSA Trst Italija junij 2018 Marka Slaparja ,
Ashok Vadekar, 3 dni, Sirius XM Satellite Radio, Florida, ZDA, februar 2018, na povabilo Aleksandra Jurišića,
Mario Valencia-Pabon, 6 dni, Université Paris XIII, Pariz, Francija, april 2018, na povabilo Boštjana Brešarja,
Dror Varolin, en teden, SUNY, Stony Brook, New York, december 2018, na povabilo Jasne Prezelj,
Kirsti Wash, 1 teden, Trinity College, Hartford, CT, ZDA, junij 2018, na povabilo Sandija Klavžarja,
Kirsti Wash, 5 dni, Western New England University, Springfield, ZDA, september 2018, na povabilo Boštjana Brešarja.

GOSTOVANJA

Člani oddelka za matematiko so bili v letu 2018 na naslednjih raziskovalnih obiskih oziroma študijskih izpopolnjevanjih v tujini:

Janez Bernik, 2 tedna, University of Waterloo, Kanada, april/maj 2018,

- Boštjan Brešar**, 7 dni, Université de Bourgogne, Dijon, Francija, maj 2018,
- Boštjan Brešar**, 7 dni, Furman University, Greenville, ZDA, junij 2018,
- Sergio Cabello**, 2 tedna, Freie Universität Berlin, Nemčija, september/oktober 2018,
- Sergio Cabello**, 2 tedna, Pohang University of Science and Technology (POSTECH), Pohang, Južna Koreja, oktober 2018,
- Sergio Cabello**, 5 tednov, Université Paris-Est, Champs-sur-Marne, Francija, november/december 2018,
- David Dolžan**, 3 mesece, University of Auckland, Auckland, Nova Zelandija, oktober/december 2018,
- Barbara Drinovec Drnovšek**, 3 dni, Instituto de Matemáticas de la Universidad de Granada, Španija, november 2018,
- Aleksandar Jurišić**, 7 tednov, Department of Combinatorics and Optimization, University of Waterloo, Kanada, maj/julij 2018,
- Sandi Klavžar**, 10 dni, Furman University, Greenville, ZDA, april 2018,
- Igor Klep**, 1 teden, University of California San Diego, ZDA, januar 2018,
- Igor Klep**, 1 teden, University of Manchester, Velika Britanija, september 2018,
- Igor Klep**, 1 teden, Victoria University, Wellington, Nova Zelandija, september 2018,
- Igor Klep**, 1 teden, Universität Konstanz, Nemčija, oktober 2018,
- Igor Klep**, 1 teden, Universität Innsbruck, Avstrija, november 2018,
- Igor Klep**, 1 teden, Università degli Studi di Trento, Italija, december 2018,
- Damjana Kokol-Bukovšek**, 3 dni, University College Dublin, Irska, april 2018,
- Štefko Miklavič**, 10 dni, Seattle University, Seattle, ZDA, maj 2018,
- Štefko Miklavič**, 6 dni, Antalya Bilim University, Antalya, Turčija, november 2018,
- Aljoša Peperko**, 5 dni, TU Graz, Gradec, Avstrija, oktober 2018,
- Lucijan Plevnik**, 5 dni, University of Warmia and Mazury, Faculty of Mathematics and Computer Science, Olsztyn, Poljska, julij 2018,
- Jasna Prezelj**, 3 mesece, DiMaI, Università di Firenze, Firenze, Italija, februar/junij 2018,
- Nik Stopar**, 1 dan, Karl-Franzens-Universität Graz, Gradec, Avstrija, december 2018.

SEMINARJI

Seminar za algebro in funkcionalno analizo

Vodji seminarja sta Roman Drnovšek in Primož Moravec. V letu 2018 je seminar imel 27 sestankov, na katerih je bilo v povprečju 8 poslušalcev. Spletna stran seminarja je: <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-algebra-funkcionalna/>

Peter Šemrl, *Izometrije Grassmannovih prostorov*, 4. 1.,

Janko Bračič, *Lica množice operatorjev z numerično zalogo vrednosti v dani konveksni množici*, 11. 1.,

Janez Povh, *Extracting optimum by (robust) GNS method*, 18. 1.,

Mykola Khrypchenko, *An embedding theorem for restriction semigroups*, 6. 2.,

Primož Moravec, *Stable rationality of invariants of function fields*, 22. 2.,

Marjeta Kramar Fijavž, *Semigroup approach to differential operators with general boundary conditions*, 1. 3.,

Karin Cvetko Vah, *Operacija posodobi v poševnih mrežah*, 8. 3.,

Bojan Kuzma, *Matrices with extremal commutants and beyond*, 15. 3.,

Polona Oblak, *5 definitions of rank of a matrix over semiring*, 22. 3.,

Klemen Šivic, *Konstrukcija pozitivnih preslikav, ki niso povsem pozitivne*, 29. 3.,

Annon Rosenmann, *Polynomial convolutions in max-plus algebra*, 5. 4.,

Petar Pavešič, *Group of units in UU-rings*, 12. 4.,

Christian Budde, *Extrapolation and Perturbation of Bi-Continuous Semigroups*, 19. 4.,

Michael Kaplin, *Relatively uniformly continuous semigroups of positive operators on vector lattices*, 10. 5.,

Des Fitzgerald, *Representing inverse semigroups in complete inverse algebras*, 17. 5.,

Vladimir Müller, *Diagonals of operators and Blaschke's enigma*, 24. 5.,

Matjaž Konvalinka, *Determinante v kombinatoriki*, 31. 5.,

Janez Bernik, *Klasifikacija nilpotentnih Liejevih algeber maksimalne dolžine, prvi del*, 18. 10.,

Sam Corson, *The nicest possible homomorphisms*, 25. 10.,

Janez Bernik, *Klasifikacija nilpotentnih Liejevih algeber maksimalne dolžine, drugi del*, 8. 11.,

Marko Kandić, *On representations of certain functionals on Stone vector lattices*, 15. 11.,

- Ilja Gogić**, *CB-norm approximation of generalized skew derivations by elementary operators*, 22. 11.,
- Michael Kaplin**, *Introduction to relatively uniformly continuous semigroups of positive operators on vector lattices*, 29. 11.,
- Klemen Šivic**, *Primeri ekstremnih pozitivnih preslikav*, 6. 12.,
- Aljoša Peperko**, *Bonsall and lower cone spectral radius and approximate point spectrum*, 13. 12.,
- Qinghai Zhong**, *Factorization theory in Krull monoids*, 20. 12.

Seminar IMFM in FNM v Mariboru iz diskretne matematike

Seminar vodita Boštjan Brešar in Sandi Klavžar. V letu 2018 je imel 24 srečanj. V povprečju je bilo na seminarju 13 udeležencev. Najbolj obiskano predavanje je bilo 28. 5. 2018 (18 poslušalcev). Domača stran seminarja je na naslovu: <http://omr.fnm.um.si/index.php/category/seminar-iz-diskretne-matematike/>.

- Polona Repolusk**, *Cestninsko število na krepkem produktu grafov*, 22. 1.,
- Aleksander Vesel**, *Vozliščni komplementi posplošenih Fibonaccijevih kock*, 26. 2.,
- Valentin Gledel (University of Lyon, Francija)**, *Maker-Breaker domination game*, 5. 3.,
- Andrej Taranenko**, *Grafi z največjo povezavno metrično dimenzijo*, 12. 3.,
- Marko Jakovac**, *Anihilacijsko število grafa*, 19. 3.,
- Tjaša Paj**, *Nekateri rezultati o povezanosti in neodvisnih množicah v produktih grafov*, 1. del, 26. 3.,
- Mario Valencia-Pabon (University Paris XIII, Francija)**, *Complexity of the cluster deletion problem on cographs and subclasses of chordal graphs*, 9. 4.,
- Tjaša Paj**, *Nekateri rezultati o povezanosti in neodvisnih množicah v produktih grafov*, 2. del, 16. 4.,
- Marko Jakovac**, *Anihilacijsko število in dominacijske invariante*, 23. 4.,
- Daša Štesl**, *Zgornje meje za celotno dominacijsko igro*, 14. 5.,
- Tjaša Paj**, *Nekateri rezultati o povezanosti in neodvisnih množicah v produktih grafov*, pregledano. del, 21. 5.,
- Nevena Srečković**, *Uporaba teorije grafov pri analizi električnih distribucijskih omrežij*, 28. 5.,
- Paul C. Kainen (Georgetown University, ZDA)**, *Topology and geometry in neural network approximation*, 28. 5.,

- Drago Bokal**, *Psychological and mathematical insights into enjoying research and studying*, 28. 5.,
- Michael Henning (University of Johannesburg, Južna Afrika)**, *Essential lower bounds on the matching number and essential upper bounds on the total domination number*, 6. 7.,
- Petra Žigert Pleteršek**, *Marjetične kocke in benzenoidni sistemi*, 1. 10.,
- Sandi Klavžar**, *Krepko geodetski problem*, 8. 10.,
- Aleksander Vesel**, *Pakirna barvanja nekaterih posplošitev grafov Sierpińskega*, 15. 10.,
- Iztok Peterin**, *Pakirno število in grafovski produkti*, 22. 10.,
- Tim Kos**, *Dominacijska zaporedja v Kneserjevih grafih*, 5. 11.,
- Wilfried Imrich**, *Asymmetric colorings of trees*, 12. 11.,
- Jasmina Ferme**, *Pakirna barvanja subkubičnih grafov*, 19. 11.,
- Aleksander Kelenc**, *Na razdaljah osnovane invariante in mere v grafih*, 26. 11.,
- Boštjan Brešar**, *Izbrani rezultati o pakirnih barvanjih grafov*, 3. 12.

Seminar za verjetnost, statistiko in finančno matematiko

Vodje seminarja so Janez Bernik, Tomaž Košir in Mihael Perman. V letu 2018 se je zvrstilo 13 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/>.

- Veno Mramor**, *Verjetnostne mere na krožnicah, porojene s celoštevilsko mrežo*, 4. 1.,
- Damjana Kokol Bukovšek**, *Assymetry of copulas arising from shock models*, 8. 3.,
- Martin Raič**, *Večrazsežni Berry-Essenov izrek - nekaj zgodovine in sodobni razvoj*, 15. 3.,
- Blaž Mojškrč**, *Asymmetric linkages: maximum vs. inverse maximum copulas*, 22. 3.,
- József Lőrinczi**, *Long and short time sample properties of a class of Lévy type processes*, 29. 3.,
- Matija Vidmar**, *Ruin under stochastic dependence between premium and claim arrivals*, 10. 5.,
- Damjan Škulj**, *The use of copulas for modelling dependence of random variables with imprecise distributions*, 17. 5.,
- Anna Rita Bacinello**, *Variable annuities as options packages: a market-consistent valuation approach*, 24. 5.,

Nacira Agram, *Forward/backward stochastic Volterra equation and related topics*, 31. 5.,

Antonino Zanette, *Pricing and hedging GLWB and GMWB in the Heston and Black-Scholes model with stochastic interest rates*, 14. 6.,

Špela Poklukar, *Kripto podatkovne zbirke*, 30. 8.,

Milica Krković, *Modeliranje verjetnosti neplačila v bančnem sektorju*, 8. 11.,

Peter Kink, *Elementarna kvantna verjetnost*, 20. 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. V letu 2018 smo pripravili 7 predavanj. Spletna stran seminarja je <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-geometrija/>.

Blaž Jelenc, *Milnorjeva rešitev problema optimalne kartografske projekcije*, 22. 10.,

Blaž Jelenc, *Čebiševa rešitev problema optimalne kartografske projekcije*, 5. 11.,

Jure Kališnik, *Inducirane reprezentacije grupoidov*, 12. 11.,

Jure Kališnik, *Frobeniusova recipročnost*, 19. 11.,

Jure Kališnik, *Koinducirane reprezentacije*, 26. 11.,

Jure Kališnik, *Karakter inducirane reprezentacije*, 10. 12.,

Jure Kališnik, *Mackeyev kriterij za nerazcepnost inducirane reprezentacije*, 17. 12.

Seminar za geometrijsko topologijo

Vodji seminarja sta Matija Cencelj in Dušan Repovš. V letu 2018 je bilo 25 sestankov. Seminar ima uradno spletno stran <http://www.pef.uni-lj.si/sgt/>.

Žiga Virk, *Aproksimacije metričnih grafov z Ripsovimi filtracijami*, 10. 1. (2 uri),

Jaka Smrekar, *Atiyah-Hirzebruchovo zaporedje in analitični cikli*, 17. 1. (2 uri),

Aleš Vavpetič, *Ekstremno nepovezani prostori*, 28. 2. (2 uri),

Boštjan Gabrovšek, *Plat dekompozicije vozlov v 3-mnogoterostih*, 1. del, 7. 3. (2 uri),

- Boštjan Gabrovšek**, *Plat dekompozicije vozlov v 3-mnogoterostih*, 2. del, 14. 3. (2 uri),
- Leon Lampret**, *Laplaceovi operatorji verižnega kompleksa*, 1. del, 21. 3. (2 uri),
- Leon Lampret**, *Laplaceovi operatorji verižnega kompleksa*, 2. del, 28. 3. (2 uri),
- Sara Kališnik Verovšek**, *Povezave med algebraično geometrijo in uporabno topologijo*, 4. 4. (2 uri),
- Eva Horvat**, *Geometrična biklapa vozla*, 11. 4. (2 uri),
- Eva Horvat**, *Klasične invariante satelitskih vozlov*, 18. 4. (2 uri),
- Denise Halverson**, *Recent developments in decomposition theory*, 1. del, 9. 5. (2 uri),
- Denise Halverson**, *Recent developments in decomposition theory*, 2. del, 16. 5. (2 uri),
- Jerzy Dydak**, *Unifying large scale and small scale geometry*, 1. del, 23. 5. (2 uri),
- Jerzy Dydak**, *Unifying large scale and small scale geometry*, 2. del, 30. 5. (2 uri),
- Jerzy Dydak**, *Topological aspects of coarse geometry*, 6. 6. (2 uri),
- Jože Malešič**, *Nekatere invariante vozlov v polnem torusu*, 1. del, 3. 10. (2 uri),
- Jože Malešič**, *Nekatere invariante vozlov v polnem torusu*, 2. del, 10. 10. (2 uri),
- Friedrich Hegenbarth**, *Characterization of generalized manifolds among compact metric ANR-spaces*, 17. 10. (2 uri),
- Boštjan Lemež**, *Posplošene inverzne limite indeksirane z množico celih števil*, 1. del, 7. 11. (2 uri),
- Boštjan Lemež**, *Posplošene inverzne limite indeksirane z množico celih števil*, 2. del, 14. 11. (2 uri),
- Dejan Govc**, *Ripsova magnituda*, 21. 11. (2 uri),
- Leon Lampret**, *Nekaj algoritmov za računanje homologije verižnih kompleksov*, 1. del, 28. 11. (2 uri),
- Leon Lampret**, *Nekaj algoritmov za računanje homologije verižnih kompleksov*, 2. del, 5. 12. (2 uri),
- Eva Horvat**, *Klapne invariante vozlov v polnem torusu*, 12. 12. (2 uri),
- Eva Horvat**, *Fundamentalna klapa kot funktor*, 19. 12. (2 uri).

Seminar za teorijo grup in kombinatoriko

Vodje seminarja so Aleksander Malnič, Dragan Marušič in Primož Šparl. V letu 2018 se je seminar redno sestal 20 krat. Predavali so:

- Aleksander Malnič**, *Refleksibilni polinomi*, 2. del, 4. 1.,
Primož Šparl, *Posplošene grafavske trunkacije in izomorfizmi med njimi*, 22. 3.,
Aleksander Malnič, *O egipčanskih ulomkih*, 29. 3.,
Boštjan Kuzman, *Preverjanje znanja iz verjetnosti z elektronsko vadnico*, 5. 4.,
Dejan Krejić, *Babaiev izrek*, 19. 4.,
Slobodan Filipovski, *On the excess of vertex-transitive graphs of given degree and girth*, 24. 5.,
Micael Toledo, *On cubic vertex-transitive tricirculants*, 7. 6.,
Dejan Krejić, *Vloga semiregularnih avtomorfizmov pri problemu hamiltonskosti vozliščno tranzitivnih grafov*, 21. 6.,
Aleksander Malnič, *Krovi digrafov*, 1. del, 26. 9.,
Aleksander Malnič, *Krovi digrafov*, 2. del, 1. 10.,
Aleksander Malnič, *Krovi digrafov*, 3. del, 8. 10.,
Boštjan Kuzman, *Nabori kock s standardno porazdeljeno vsoto pik*, 15. 10.,
Vesna Iršič, *Total domination game*, 22. 10.,
Primož Šparl, *Tetravalent half-arc-transitive metacirculants revisited*, 5. 11.,
Ana Petek, *Hamiltonska povezanost Cayleyevih grafov komutativnih grup*, 12. 11.,
Urška Lamovec, *Schurova števila*, 19. 11.,
Iza Hanžek Šušteršič, *Kombinatorični izrek o ničlah*, 26. 11.,
Rok Požar, *Grafovski pristop za analizo delovanja možganov*, 3. 12.,
Alejandra Ramos Rivera, *On biregular bipartite cages*, 10. 12.,
Rok Požar, *The simultaneous conjugacy problem in the symmetric group*, 17. 12.

Seminar za kompleksno analizo

Seminar za kompleksno analizo vodita Franc Forstnerič in Barbara Drinovec Drnovšek. Rednih članov je bilo 15. 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 2018 je imel 28 sestankov in povprečno 13 poslušalcev.

- Uroš Kuzman**, *Runge approximation theorem on compact manifolds*, 9. 1.,
Antonio Alarcon, *Complete complex submanifolds in the ball come in foliations*, 16. 1.,
Tuyen Trung Truong, *Can we intersect a line in the plane with itself?*, 22. 2.,
Jörg Winkelmann, *Tame discrete sets in complex manifolds*, 27. 2.,
Franc Forstnerič, *Runge tubes*, 6. 3.,
Tadej Starčič, *On normal forms of complex points of codimension 2 submanifolds*, 2. del, 13. 3.,
Rafael Andrist, *On the existence of tame sets*, 20. 3.,
Mitja Nedić, *The convex combination problem for Herglotz-Nevanlinna functions*, 22. 3.,
Leandro Arosio, *Dynamics of transcendental Hénon maps*, 27. 3.,
Han Peters, *Zeros of the Ising partition function*, 29. 3.,
Verónica L. Cánovas, *Marginally trapped submanifolds in de Sitter space*, 3. 4.,
Filippo Bracci, *Fantastic Fatou components and where to find them*, 10. 4.,
Ildefonso Castro-Infantes, *Approximation and interpolation by conformal minimal immersions of finite total curvature and optimal hitting problem*, 17. 4.,
Mark Lawrence, *Knots and polynomial hulls of tori*, 8. 5.,
David Kalaj, *Harmonic diffeomorphisms and Schwarz lemma*, 22. 5.,
Mi Hu, *Application of Kobayashi hyperbolicity in complex dynamics*, 29. 5.,
Aleksey Kostenko, *On the absolutely continuous spectrum of Schrödinger operators and strings*, 31. 5.,
Azimbay Sadullaev, *Further developments of the pluripotential theory*, 14. 9.,
Ilya Kossovskiy, *Segre family approach to the classification of real-analytic hypersurfaces and applications*, 8. 10.,
Franc Forstnerič, *On a theorem of Yuta Kusakabe*, 16. 10.,
Franc Forstnerič, *H-principle for complex contact structures on Stein manifolds*, 23. 10.,
Tadej Starčič, *On normal forms of complex points of small C^2 -perturbations of real 4-manifolds in complex 3-manifolds*, 30. 10.,
Uroš Kuzman, *On Poletsky theory of discs in compact (almost) complex manifolds*, 6. 11.,
Oliver Dragičević, *Dissipativity of forms and orthogonal projections onto L^p -balls in L^2 spaces*, 13. 11.,
Nicola Pia, *Exotic holomorphic Engel structures on \mathbb{C}^4* , 20. 11.,
Thomas Pawlaschyk, *On q -plurisubharmonic functions in the sense of*

viscosity, 27. 11.,

Dror Varolin, *Direct images of holomorphic vector bundles*, 11. 12.,

Brett Chenoweth, *Carleman approximation by directed holomorphic curves*, 18. 12.

Seminar iz kriptografije in teorije kodiranja

Vodja seminarja je Aleksandar Jurišić. Seminar je v letu 2018 imel 37 sestankov (od tega 22 delavnic, skupno 122 ur). V povprečju je bilo na seminarju 5 udeležencev.

V letu 2018 so se zvrstila naslednja predavanja:

Aleksandar Jurišić, *Razdaljno regularni grafi*, 2. del, 8. 1. (3 ure),

Aleksandar Jurišić, *Razdaljno regularni grafi*, 3. del, 15. 1. (3 ure).

49. DELAVNICA IZ KRIPTOGRAFIJE

Jason Bercher, *A proposal for a cryptographic digital stamp to fight fraud (Predlog za kriptografsko digitalno znamko)*, 18. 1. (20 min),

Matej Horvat, *The Serpent block cipher (Bločna šifra Serpent)*, 18. 1. (20 min),

Žiga Kern, *Prijava v OS Microsoft Windows s pametno kartico FRI-Card*, 18. 1. (20 min),

David Klemenc, *Cryptocurrency mining strategies comparison (Primerjava strategij za rudarjenje kriptovalut)*, 18. 1. (20 min),

Katarina Milačić, *E-voting (E-volitve)*, 18. 1. (20 min),

Alizée Perrin, *Wireless Smart Cards on User Data Security (Brezžične pametne kartice in varnost podatkov)*, 18. 1. (20 min),

Niklas Schelten, *Hash function SHA-3 (Zgoščevalna funkcija SHA-3)*, 18. 1. (20 min),

Anton Schwericke, *Cryptocurrencies (Kriptovalute)*, 18. 1. (20 min),

Luka Seničić, *Mental poker (Miselni poker)*, 18. 1. (20 min),

Mirjam Skobe, *Floyd's Algorithm (Floydov algoritem)*, 18. 1. (20 min),

Stefan Ivanišević, *Fish and Colossus (Riba in Colossus)*, 18. 1. (20 min),

Jan Šubelj, *Anonymity with onion routing and Tor (Anonimnost z nivojskim usmerjanjem in Tor)*, 18. 1. (20 min),

Aleksandra Turanjanin, *Cryptanalysis of the SIM card (Kriptoanaliza SIM kartice)*, 18. 1. (20 min),

Matej Zavrtnik, *Message Authentication Code - MAC (Koda za overjanje sporočila)*, 18. 1. (20 min)

Aleksandar Jurišić, *Razdaljno-regularni grafi*, 4. del, 22. 2. (2 uri),
Aleksandar Jurišić, *Razdaljno-regularni grafi*, 5. del, 1. 3. (2 uri),
Aleksandar Jurišić, *Razdaljno-regularni grafi*, 6. del, 8. 3. (2 uri).

50. DELAVNICA

Aleksandar Jurišić, *eQuiz (predstavitev ciljev projekta K4)*, 12. del, 12. 3. (4 ure)

51. DELAVNICA

Martin Vuk, *eQuiz (delitev repozitorija)*, 13. del, 14. 3. (4 ure)

52. DELAVNICA

Martin Vuk, *eQuiz (avtomatizacija oddaje nove verzije)*, 13. del, 21. 3. (4 ure)

Aleša Papler, *Uporaba tehnologije RFID in šifriranja za zaščito izdelkov in ugotavljanje ponaredkov*, 22. 3. (2 uri).

53. DELAVNICA

Gašper Cankar, *eQuiz (rating)*, 13. del, 26. 3. (4 ure)

54. DELAVNICA

Boštjan Kuzman, *eQuiz (alternativni sistemi)*, 14. del, 28. 3. (4 ure)

55. DELAVNICA

Maj Lenaršič, *eQuiz*, 15. del, 4. 4. (4 ure)

56. DELAVNICA

Andraž Dobnikar, *eQuiz (zaledni sistem)*, 16. del, 9. 4. (4 ure)

57. DELAVNICA

Nejc Šubic, *eQuiz (implementacija ratinga)*, 17. del, 11. 4. (4 ure)

58. DELAVNICA

Andraž Dobnikar, *eQuiz (postavitev zalednega sistema)*, 18. del, 16. 4. (4 ure)

59. DELAVNICA

Timotej Knez, *eQuiz*, 19. del, 23. 4. (4 ure)

60. DELAVNICA

Ivana Prem, *eQuiz (priprava za implementacijo ratinga)*, 20. del, 25. 4. (4 ure)

61. DELAVNICA

Janoš Vidali, *eQuiz (vključitev novih implementacij)*, 21. del, 7. 5. (4 ure)

62. DELAVNICA

Erik Janežič, *eQuiz (oblikovanje komponente razredi)*, 22. del, 9. 5. (4 ure)

63. DELAVNICA

Maj Lenaršič, *eQuiz (izpiti in testiranje)*, 23. del, 14. 5. (4 ure)

64. DELAVNICA

Timotej Knez, *eQuiz (testiranje mobilnih naprav)*, 24. del, 16. 5. (4 ure)

65. DELAVNICA

Erik Janežič, *eQuiz (naprednejša knjižnica)*, 25. del, 21. 5. (4 ure)

66. DELAVNICA

Timotej Knez, *eQuiz (administratorske naloge)*, 26. del, 23. 5. (4 ure)

67. DELAVNICA

Maj Lenaršič, *eQuiz (optimizacija kode)*, 27. del, 28. 5. (4 ure)

68. DELAVNICA

Janoš Vidali, *eQuiz (hierarhija skupin)*, 28. del, 30. 5. (4 ure)

69. DELAVNICA

Domen Gašperlin, *eQuiz (pregled varnostnih mehanizmov)*, 29. del, 13. 6. (4 ure)

70. DELAVNICA

Aleksandar Jurišič, *eQuiz (priprava pilota Izpit)*, 30. del, 21. 8. (8 ur)

Aleksandar Jurišić, *M₂₂ in Cameronov graf*, 1. del, 4. 10. (2 uri),
Aleksandar Jurišić, *M₂₂ in Cameronov graf*, 2. del, 11. 10. (2 uri),
Janoš Vidali, *Novi karakterizaciji grafov bilinearnih form*, 18. 10. (2 uri),
Aleksandar Jurišić, *Test vektorji za tokovne šifre*, 25. 10. (2 uri),
Aleksandar Jurišić, *Kriptografija za najmlajše*, 8. 11. (2 uri),
Aleksandar Jurišić, *Verjetnost in statistika poenostavljeno*, 15. 11. (2 uri),
Aleksandar Jurišić, *Varnost kriptografskih protokolov*, 22. 11. (2 uri),
Aljaž Zalar, *Spletni učbeniki*, 29. 11. (2 uri),
Aleksandar Jurišić, *Novi projekt ŠIPK*, 7. 12. (2 uri),
Aleksandar Jurišić, *Uvod v končne obsege*, 14. 12. (2 uri).

Seminar za numerično analizo

Seminar za numerično analizo vodi Bor Plestenjak. Seminar se je v letu 2018 sestel petindvajsetkrat. V povprečju je bilo na seminarju 10 udeležencev. Podatki o delu seminarja so dostopni na naslovu <http://www.fmf.uni-lj.si/si/si/obvestila/agregator/seminar-numericna-analiza/>.

Bor Plestenjak, *Numerično reševanje triparametričnih problemov lastnih vrednosti*, 10. 1. (1 ura),
Emil Žagar, *Pedagoško-raziskovalni obisk Karlove univerze v Pragi*, 17. 1. (1 ura),
Bor Plestenjak, *Numerične metode za tenzorje*, 25. 1. (1 ura),
Emil Žagar, *Polinomski aproksimanti krožnih lokov, ki ohranjajo ploščino krožnega izseka*, 28. 2. (1 ura),
Emil Žagar, *Optimalna aproksimacija krožnih lokov z G^1 zveznimi polinomskimi krivuljami*, 1. del, 7. 3. (1 ura),
Emil Žagar, *Optimalna aproksimacija krožnih lokov z G^1 zveznimi polinomskimi krivuljami*, 2. del, 14. 3. (1 ura),
Bor Plestenjak, *Singularni posplošeni problem lastnih vrednosti*, 21. 3. (1 ura),
Emil Žagar, *Geometrijska interpolacija G^1 podatkov z ravninskimi PH krivuljami predpisane ločne dolžine, drugi del*, 28. 3. (1 ura),
Michiel Hochstenbach, *Some recent progress in large-scale optimization*, 4. 4. (1 ura),
Jure Slak, *Aproksimacije diferencialnih operatorjev v smislu končnih diferenc z radialnimi baznimi funkcijami*, 11. 4. (1 ura),
Marjeta Knez, *Konstrukcija gibanj togih teles z uporabo kubičnih PH dvo-lokov*, 18. 4. (1 ura),

- Marjeta Knez**, *Konstrukcija gibanj togih teles z uporabo kubičnih PH dvolokov*, 2. del, 25. 4. (1 ura),
- Aleš Vavpetič**, *Optimalna aproksimacija krožnih lokov s polinomskimi krivuljami*, 9. 5. (1 ura),
- Miklós Hoffmann**, *Caustics and isoptics of curves and surfaces*, 16. 5. (1 ura),
- Jure Slak**, *Izogeometrična analiza*, 30. 5. (1 ura),
- Bor Plestenjak**, *Tenzorji, drugi del*, 6. 6. (1 ura),
- Bor Plestenjak**, **Emil Žagar**, *Poročila s konferenc*, 3. 10. (1 ura),
- Bor Plestenjak**, *Uporaba projekta Tomo za učenje Matlaba*, 10. 10. (1 ura),
- Marjeta Knez**, *Poročilo s konference*, 17. 10. (1 ura),
- Jure Slak**, *Konstrukcije distribucij točk za brez mrežne diskretizacije PDE*, 24. 10. (1 ura),
- Emil Žagar**, *Pogovor o zgodovini numerične matematike na OM FMF*, 7. 11. (1 ura),
- Bor Plestenjak**, *Reševanje singularnega posplošenega problema lastnih vrednosti s perturbacijami*, 14. 11. (1 ura),
- Timotej Hrga**, *Uporaba visokozmogljivega računalništva pri izračunu neodvisnega števila grafa*, 21. 11. (1 ura),
- Jan Grošelj**, *Recepti za kvazi-interpolacijo s kubičnimi Powell-Sabinovimi zlepkami*, 1. del, 12. 12. (1 ura),
- Jan Grošelj**, *Recepti za kvazi-interpolacijo s kubičnimi Powell-Sabinovimi zlepkami*, 2. del, 19. 12. (1 ura).

Topološki seminar

Seminar je imel v povprečju 12 udeležencev, vodil pa ga je Petar Pavešić. V letu 2018 se je zvrstilo 28 predavanj o raznih temah. Domača stran seminarja je na: <http://www.fmf.uni-lj.si/si/obvestila/agregator/seminar-topologija/>.

- Davorin Lešnik**, *Eksponenciabilnost topoloških prostorov in povezava s strukturami urejenosti*, 8. 1.,
- Davorin Lešnik**, *Eksponenciabilnost topoloških prostorov in povezava s strukturami urejenosti*, 2. del, 15. 1.,
- Jure Kališnik**, *Izrek o indeksu in K-teorija*, 19. 2.,
- Jure Kališnik**, *K-teorija s kompaktnimi nosilci*, 26. 2.,
- Jure Kališnik**, *K-teorija s kompaktnimi nosilci*, 2. del, 5. 3.,
- Jure Kališnik**, *K-teorija s kompaktnimi nosilci*, 3. del, 12. 3.,
- Jure Kališnik**, *Topološki indeks*, 19. 3.,

- Jure Kališnik**, *Topološki indeks*, 2. del, 26. 3.,
Jure Kališnik, *Analitični indeks*, 9. 4.,
Jure Kališnik, *Analitični indeks*, 2. del, 16. 4.,
Brendan Owens, *Slice surfaces and double-branched covers*, 23. 4.,
Jure Kališnik, *Analitični indeks*, 3. del, 7. 5.,
Jure Kališnik, *Dokaz izreka o indeksu*, 14. 5.,
Petar Pavešić, *Komponente dvižnih prostorov*, 21. 5.,
Petar Pavešić, *Komponente dvižnih prostorov*, 2. del, 28. 5.,
Petar Pavešić, *Komponente dvižnih prostorov*, 3. del, 4. 6.,
Davorin Lešnik, *Karakterizacija enakomernih topologij*, 1. 10.,
Ilya Kossovskiy, *Segre family approach to the classification of real-analytic hypersurfaces and applications*, 8. 10.,
Davorin Lešnik, *Karakterizacija enakomernih topologij*, 2. del, 15. 10.,
Sam Corson, *The homomorphisms from the Hawaiian earring group*, 22. 10.,
Greg Conne, *Some Notes on Wild Geometric Group Theory*, 29. 10.,
Davorin Lešnik, *Karakterizacija enakomernih topologij*, 3. del, 5. 11.,
Žiga Virk, *Dowkerjeva dualnost in izrek o živcu*, 12. 11.,
Žiga Virk, *Dowkerjeva dualnost in izrek o živcu*, 2. del, 19. 11.,
Dejan Govc, *Neurotopologija*, 26. 11.,
Žiga Virk, *Dowkerjeva dualnost in izrek o živcu*, 3. del, 3. 12.,
Jože Vrabec, *Alexandrova dualnost*, 10. 12.,
Jože Vrabec, *Alexandrova dualnost*, 2. del, 17. 12.

Seminar IMFM in FNM v Mariboru iz topologije

Seminar vodita Iztok Banič in Uroš Milutinović. V letu 2018 je v okviru Seminarja bilo opravljenih 13 dvehurnih 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/>.

- Boštjan Lemež**, *Konstrukcija večlične funkcije, za katero velja, da je njen graf homeomorfen inverzni limiti s to vezno funkcijo*, 1. del, 8. 1. (2 uri),
Boštjan Lemež, *Konstrukcija večlične funkcije, za katero velja, da je njen graf homeomorfen inverzni limiti s to vezno funkcijo*, 2. del, 15. 1. (2 uri),
Iztok Banič, *Kompaktifikacije žarkov in inverzne limite*, 1. del, 19. 2. (2 uri),
Iztok Banič, *Kompaktifikacije žarkov in inverzne limite*, 2. del, 26. 2. (2 uri),

Boštjan Lemež, *An upper semicontinuous function f whose graph is homeomorphic to the inverse limit of closed unit intervals with f as the bonding function*, 12. 3. (2 uri),

Matevž Črepnjak, *Inverzne limite z markovskimi večličnimi funkcijami*, 1. del, 9. 4. (2 uri),

Matevž Črepnjak, *Inverzne limite z markovskimi večličnimi funkcijami*, 2. del, 16. 4. (2 uri),

Tina Sovič, *Kvocientne preslikave in inverzne limite*, 1. del, 14. 5. (2 uri),

Tina Sovič, *Kvocientne preslikave in inverzne limite*, 2. del, 21. 5. (2 uri),

Paul C. Kainen, *Topology and Geometry in Neural Network Approximation*, 28. 5. (2),

Iztok Banič, *Karakterizacija lastnosti fiksne točke za ravninske kontinuumne*, 22. 10. (2 uri),

Matevž Črepnjak, *Drevesa in inverzne limite*, 5. 11. (2 uri),

Matej Merhar, *Minimalni kontinuumi*, 26. 11. (2 uri).

Mednarodni topološki seminar Ljubljana–Maribor–Zagreb

V letu 2018 se je *Topološki seminar Ljubljana–Zagreb–Maribor* sestel trikrat in sicer 14. aprila v Mariboru, kjer je bilo prisotnih 20 poslušalcev, 26. maja v Ljubljani, kjer je bilo prisotnih 16 poslušalcev in 8. decembra v Zagrebu, kjer je bilo prisotnih 19 poslušalcev.

Maribor

Boštjan Gabrovšek, *Knots in projective spaces*, 14. 4.,

Ana Anušič, *Inhomogeneities of unimodal inverse limits*, 14. 4.

Ljubljana

Matija Bašič, *Combinatorial models for stable homotopy theory*, 26. 5.,

Boštjan Lemež, *An uncountable family of upper semicontinuous functions F such that the graph of F is homeomorphic to the inverse limit of closed unit intervals with F as the only bonding function*, 26. 5.

Zagreb

Leon Lampret, *How to reduce a chain complex*, 8. 12.,

Iztok Banič, *Characterization of tree-like continua that do not have the fixed point property*, 8. 12.

ODDELEK ZA FIZIKO

PROJEKTI

V letu 2018 smo člani oddelka delovali v okviru raziskovalnega programa

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

kakor tudi 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 dveh mednarodnih projektih:

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

Zvonko Jagličić, *Optični magnetometri kot novi biomedicinski senzorji pri slušnem odzivu možganov in pri zaznavi magnetnih nanodelcev*, BI-DE/18-19-003 (dvostranski z Nemčijo).

VODENJE RAZISKOVALNEGA CENTRA

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

MLADI RAZISKOVALCI

V okviru Oddelka za fiziko je v letu 2018 je začel usposabljanje mladi raziskovalec

Urban Marhl, mentor V. Jazbinšek.

BIBLIOGRAFIJE RAZISKOVALCEV**Patricia Cotič Smole:**

- G1. *Individualized magnetoencephalography using optically pumped magnetometers with an anatomy derived sensor holder*, 52nd Annual Conference of the German Society for Biomedical Engineering, Aachen, Nemčija, september 2018.

Rok Hren:

- F1. *ISPOR Health Science Policy Council support to the ISPOR community and its research activities in the region*, vabljeno predavanje, 8th Adriatic and 5th ISPOR Chapter Serbia Congress of Pharmacoeconomics and Outcomes Research, Beograd, Srbija, april 2018.
- F2. *Access to innovation and reimbursement – experience in Slovenia*, vabljeno predavanje, Innovation Forum: With Innovation to a Healthy Nation, Skopje, Makedonija, maj 2018.
- F3. *Challenges in pharmaceutical HTA and reimbursement processes*, vabljeno predavanje, Patient Access to Medical Innovation – Regional Challenges and Initiatives, Opatija, Hrvaška, september 2018.
- F4. *Performance based model kao alat za unapredjenje dostupnosti inovativnih lekova (in Serbian)*, vabljeno predavanje, Mogućnosti za unapredjenje dostupnosti inovacija i ishoda lečenja u karcinomu pluća, Beograd, Srbija, november 2018.
- F5. *Modeli finansiranja lekova zasnovani na ishodima lečenja*, vabljeno predavanje, 55. Kancerološka nedelja i 32. Simpozijum medicinskih sestara-tehničara onkoloških institucija Republike Srbije, Beograd, Srbija, november 2018.
- G1. *Budget impact analysis of point-of-care HbA1c monitoring in Belgian, German and Swiss patients with diabetes mellitus type II*, ISPOR 21st Annual International Meeting, Baltimore, ZDA, maj 2018.
- G2. *Health economics analysis of point-of-care HbA1c monitoring in Belgian, German and Swiss patients with diabetes mellitus type II*, American Diabetes Association's 78th Scientific Sessions, Orlando, ZDA, junij 2018.
- G3. *The importance of health economics modeling in assessing costs of point-of-care HbA1c testing of patients with diabetes mellitus type II in the*

- United States, 70th AACC Annual Scientific Meeting & Clinical Lab Expo, Chicago, ZDA, avgust 2018.*
- G4. *Cost-effectiveness analysis of apremilast in the treatment of psoriatic arthritis (PsA) in Slovak Republic and Slovenia, ISPOR 21st Annual European Congress, Barcelona, Španija, november 218.*
- G5. *Pharmacoeconomic evaluation of public procurement criteria in the national pneumococcal vaccine immunization program: Slovenia as a case study, ISPOR 21st Annual European Congress, Barcelona, Španija, november 218.*
- G6. *Budget impact modelling of point-of-care HbA1c monitoring of patients with diabetes mellitus type II in the United Kingdom and Australia, ISPOR 21st Annual European Congress, Barcelona, Španija, november 218.*
- I1. 3-urna delavnica (v srbskem jeziku) "Vrijednost i dostupnost inovacija" za člane AmCham, Ministrstva za zdravstvo Republike Črne Gore ter Zavoda za zdravstveno zavarovanje Črne Gore v Podgorici, Črna Gora, oktober 2018.
- I2. Eden izmed treh predavateljev 4-urne delavnice ISPOR Short Course Program "Risk-Sharing/Performance-Based Arrangements in Central & Eastern Europe: Implementation of Managed Entry Agreement", ISPOR 21st Annual European Congress, 2018.
- I3. Moderator sekcije Priority setting - criteria and processes of rare diseases management in CEE Countries at the ISPOR 21st Annual European Congress, Barcelona, november, 2018.
- I4. Član upravnega odbora (Board of Directors) neprofitne organizacije ISPOR - The Professional Society for Health Economics and Outcomes Research.
- I5. Član Health Policy and Science Council (HSPC) neprofitne organizacije ISPOR - The Professional Society for Health Economics and Outcomes Research.

Zvonko Jagličić:

- B1. S. Vrtnik, J. Lužnik, P. Koželj, A. Jelen, J. Luzar, M. Krnel, — , A. Meden, M. Feuerbacher, J. Dolinšek, *Magnetic phase diagram and magnetoresistance of Gd – Tb – Dy – Ho – Lu hexagonal high-entropy alloy*, sprejeto v objavo v Intermetallics.
- B2. H. Feizi, R. Bagheri, — , J. Pal Singh, K.H. Chae, Z. Song, M.M. Najafpour, *A nickel(II) complex under water-oxidation reaction: What is*

the true catalyst?, sprejeto v objavo v Dalton Transactions.

- C1. L. Radovanović, J. Rogan, D. Poleti, M. V. Rodić, — , *Diaguabis(2,2'-dipyridylamine)M(II) terephthalate dihydrates, M(II) = Ni, Co: synthesis, crystal structures, thermal and magnetic properties*, Acta Chim. Slov. **65** (2018), 191–198.
- C2. B. Babić-Stojić, V. Jokanović, D. Milivojević, M. Požek, — , D. Makovec, N. Jović Orsini, M. Marković, K. Arsić, V. Paunović, *Ultrasmall iron oxide nanoparticles : magnetic and NMR relaxometric properties*, Current Applied Physics **18** (2018), 141–149.
- C3. L. Pajek, R. Kunič, — , *Fazno spremenljive snovi (PCM) in njihova uporaba v stavbah*, Gradb. Vestn. **67** (2018), 51–62.
- C4. S. Koohzad, H. Golchoubian, — , *Structural, solvatochromism and magnetic properties of two halogen bridged dinuclear copper (II) complexes: a density functional study*, Inorg. Chim. Acta **473** (2018), 60–69.
- C5. S. Vrtnik, S. Guo, S. Sheikh, A. Jelen, P. Koželj, J. Luzar, A. Kocjan, — , A. Meden, H. Guim, H.-J. Kim, J. Dolinšek, *Magnetism of CoCrFeNiZr_x eutectic high-entropy alloys*, Intermetallics **93** (2018), 122–133.
- C6. S. Vrtnik, J. Lužnik, P. Koželj, A. Jelen, J. Luzar, — , A. Meden, M. Feuerbacher, J. Dolinšek, *Disordered ferromagnetic state in the Ce-Gd-Tb-Dy-Ho hexagonal high-entropy alloy*, J. Alloys Compd. **742** (2018), 877–886.
- C7. T. Dorđević, L. Karanović, — , *A new copper(II) arsenate, Na₂Cu₃(AsO₃OH)₄ · 4H₂O containing discrete [Cu₃O₁₂]¹⁸⁻ units: synthesis, crystal structure and magnetic properties*, J. Solid State Chem. **265** (2018), 55–63.
- C8. B. R. Čobeljić, A. Pevec, — , M. Milenković, I. Turel, D. Radanović, M. Milenković, K. Anđelković., *Synthesis, characterization and antimicrobial activity of isothiocyanato Fe(III) Girard's T hydrazone complex*, J. Serb. Chem. Soc. **83** (2018), 1327–1337.
- C9. E. Safaei, Z. Alaji, F. Panahi, A. Wojtczak, — , *ynthesis and characterization of a novel oxo-bridged binuclear iron(III) complex: its catalytic application in the synthesis of benzoxazoles using benzyl alcohol in water*, New J. Chem. **42** (2018), 7230–7236.
- C10. B. R. Čobeljić, I. Turel, A. Pevec, — , D. Radanović, K. Anđelković, M. Milenković, *Synthesis, structures and magnetic properties of octahedral Co(III) complexes of heteroaromatic hydrazones with tetraisothiocyanato Co(II) anions*, Polyhedron **155** (2018), 425–432.
- C11. N. Kostevšek, S. Hudoklin, M. Erdani-Kreft, I. Serša, A. Sepe, — ,

- J. Vidmar, J. Ščančar, S. Šturm, S. Kobe, K. Žužek Rožman, *Magnetic interactions and in vitro study of biocompatible hydrocaffeic acid-stabilized Fe-Pt clusters as MRI contrast agents*, RSC Advances **8** (2018), 14694–14704.
- C12. K. Žužek Rožman, D. Pečko, Š. Trafela, Z. Samardžija, M. Spreitzer, —, P. Nadrah, M. Zorko, M. Bele, T. Tišler, A. Pintar, S. Šturm, N. Kostevšek, *Austenite–martensite transformation in electrodeposited Fe₇₀Pd₃₀ NWs : a step towards making bio-nano-actuators tested on in vivo systems*, Smart Mater. Struct. **71** (2018), 2540–2556.
- C13. S. Koohzad, H. Golchoubian, —, *A new end-on azido-bridged dicopper(II) complex; syntheses, structure, solvatochromism, magnetic properties, and DFT study*, J. Coord. Chem. **71** (2018), 2540–2556.
- F1. *Magnetism of rare earth based high entropy alloys*, vabljeno predavanje, Institut za fiziku, Zagreb, Hrvaška, maj 2018.
- F2. *Magnetism of high entropy alloys*, vabljeno predavanje, School of Chemistry and Chemical Engineering, Shandong University, Jinan, Kitajska, oktober 2018.
- G1. *Magnetic phase diagram of rare earth based high entropy alloys*, International Conference on Magnetism, San Francisco, ZDA, julij 2018.
- I1. Pisec recenzij za revije: “Inorganic chemistry”, “Ceramics International”, “The European Physical Journal Plus”, “Journal of Materials Research”, “Journal of Alloys and Compounds”, “NDT & E International”, “New Journal of Chemistry”, “Journal of Magnetism and Magnetic Materials”, “Materials Research Bulletin” in za zbornik “40. zborovanje gradbenih konstruktorjev Slovenije”.

Marko Jagodič:

- C1. S. Gyergyek, D. Pahovnik, E. Žagar, A. Mertelj, R. Kostanjšek, M. Beković, —, H. Hofmann, D. Makovec, *Nanocomposites comprised of homogeneously dispersed magnetic iron-oxide nanoparticles and poly(methyl methacrylate)*, Beilstein J. Nanotechnol **9** (2018), 1613–1622.
- C2. B.-Q. Ji, —, H.-Y. Ma, H.-F. Su, Y.-W. Li, C.-H. Tung, D. Sun, *Solution behavior and magnetic properties of a novel nonanuclear copper(II) cluster*, New J. Chem. **42** (2018), 17884–17888.
- C3. S. Gyergyek, D. Pahovnik, E. Žagar, A. Mertelj, R. Kostanjšek, M. Beković, —, H. Hofmann, D. Makovec, *Functionalization of iron oxide nanoparticles with methacrylate-based monomers for preparation of na-*

nocomposites, 9th International Conference on Times of Polymers and Composites: From Aerospace to Nanotechnology, Ishia, Italija, junij 2018, Proceedings, 020067-1 – 020067-4.

- F1. *Slow magnetic relaxation and memory effect*, vabljeno predavanje, School of Chemistry and Chemical Engineering, Shandong University, Jinan, Kitajska, oktober 2018.
- I1. Soavtor enega srednješolskega učbenika.
 I2. Mentorstvo pri enem delu diplomskega seminarja.
 I3. Recenzija enega univerzitetnega učbenika.

Vojko Jazbinšek:

- B1. Z. Trontelj, J. Lužnik, J. Pirnat, — , Z. Lavrič, S. Srčič, *Polymorphism in Sulfanilamide: ¹⁴N Nuclear Quadrupole Resonance Study*, sprejeto v objavo v J. Pharm. Sci.
- G1. *Detection of polymorphism in pharmaceutical products using ¹⁴N NQR spectroscopy*, Regionalna biofizikalna konferenca RBC 2018, Zreče, maj 2018.

Urban Marhl:

- G1. *Vpliv fizioloških determinant na kritično obnašanje v modelu sklopljenih ekscitabilnih nevronov*, 11. konferenca fizikov v osnovnih raziskavah, Dobrna, november 2018.

Janez Pirnat:

- B1. Z. Trontelj, J. Lužnik, — , V. Jazbinšek, Z. Lavrič, S. Srčič, *Polymorphism in Sulfanilamide: ¹⁴N Nuclear Quadrupole Resonance Study*, sprejeto v objavo v J. Pharm. Sci.

Zvonko Trontelj:

- B1. — , J. Lužnik, J. Pirnat, V. Jazbinšek, Z. Lavrič, S. Srčič, *Polymorphism in Sulfanilamide: ¹⁴N Nuclear Quadrupole Resonance Study*, sprejeto v objavo v J. Pharm. Sci.

TUJI GOSTI

Oddelek za fiziko je v letu 2018 gostil naslednje tuje goste:

Tilmann Sander-Thoemmes, 7 dni, Physikalisch-Technische Bundesanstalt, Berlin, Nemčija, februar/marec 2018, na povabilo Vojka Jazbinška,
Tilmann Sander-Thoemmes, 12 dni, Physikalisch-Technische Bundesanstalt, Berlin, Nemčija, november 2018, na povabilo Vojka Jazbinška,
Georg Marks, 14 dni, Physikalisch-Technische Bundesanstalt, Berlin, Nemčija, november 2018, na povabilo Vojka Jazbinška,
Tanja Barudžija, 7 dni, Institut za nuklearne nauke "Vinča", Srbija, november 2018, na povabilo Zvonka Jagličića,
Marko Bošković, 7 dni, Institut za nuklearne nauke "Vinča", Srbija, november 2018, na povabilo Zvonka Jagličića.

GOSTOVANJA

Člani oddelka za fiziko so bili v letu 2018 na naslednjih gostovanjih:

Patricia Cotič, 5 dni, Physikalisch-Technische Bundesanstalt, Berlin, Nemčija, marec 2018,
Vojko Jazbinšek, 7 dni, Physikalisch-Technische Bundesanstalt, Berlin, Nemčija, marec 2018,
Vojko Jazbinšek, 21 dni, Physikalisch-Technische Bundesanstalt, Berlin, Nemčija, junij 2018,
Zvonko Jagličić, 5 dni, Institut za nuklearne nauke "Vinča", Srbija, september 2018,
Zvonko Jagličić, 9 dni, Shandong University, Jinan, Kitajska, oktober, november 2018,
Marko Jagodič, 9 dni, Shandong University, Jinan, Kitajska, oktober, november 2018.

SEMINARJI

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

ODDELEK ZA TEORETIČNO RAČUNALNIŠTVO

BIBLIOGRAFIJE RAZISKOVALCEV

Nino Bašić:

- C1. —, P. W. Fowler, T. Pisanski, *Stratified enumeration of convex benzenoids*, MATCH Commun. Math. Comput. Chem. **80** (2018), 153–172.
- C2. —, I. Estélyi, R. Škrekovski, N. Tratnik, *On the Clar number of benzenoid graphs*, MATCH Commun. Math. Comput. Chem. **80** (2018), 173–188.
- D1. Tehnični urednik revije *Ars Mathematica Contemporanea*.
- D2. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.
- D3. Sourednik zbornika *Non-commutative structures: a workshop in honor of Jonathan Leech*, Portorož, maj 2018.

Vladimir Batagelj:

- A1. W. de Nooy, Mrvar, Andrej, —, *Exploratory social network analysis with Pajek*, 3rd ed, Cambridge University Press, Cambridge, Velika Britanija, 2018.
- D1. Član uredniškega sveta revije *The Art of Discrete and Applied Mathematics*.
- D2. Član uredniškega sveta revije *Ars Mathematica Contemporanea*.
- D3. Član uredniškega odbora revije *Journal of Social Structure*.
- D4. Član uredniškega odbora revije *Social Network Analysis and Mining*.
- D5. Član uredniškega odbora revije *Informatica*.
- D6. Član uredniškega odbora revije *Metodološki zvezki / Advances in Methodology and Statistics*.
- D7. Član uredniškega odbora revije *Presek*.
- E1. Član organizacijskega odbora konference *Srečanje raziskovalcev s področja analize omrežij*, Ljubljana, januar 2018.

- E2. Član mednarodnega programskega odbora konference *15th International Conference on Applied Statistics*, Ribno, september 2018.
- E3. Član znanstvenega odbora konference *7th Workshop on Symbolic Data Analysis*, Viana do Castelo, Portugalska, oktober 2017.
- G1. *Agglomerative clustering with relational constraints of large symbolic data sets*, SDA meeting: Data Science: New Data, New Paradigms, Pariz, Francija, januar 2018.
- G2. *Network Analysis of Peer Review Literature from WoS Based on Derived Networks*, COST project PEERE; 2018 International Conference on Peer Review, Rim, Italija, marec 2018.
- G3. *Agglomerative clustering with relational constraints of large data sets*, COST project CRoNoS: 2018 Spring Course and Workshop on Multivariate Data Analysis and Software, Limassol, Ciper, april 2018.
- G4. *Temporal cores in networks*, Sunbelt XXXVIII INSNA Conference, Utrecht, Nizozemska, junij 2018.
- G5. *The structure of the citation network for the literature on partitioning networks*, 38th Sunbelt Conference, Utrecht, Nizozemska, junij/julij 2018.
- G6. *Fractional bibliographic coupling and co-citation*, NetGloW' 18, Principles behind Structures, Sankt Peterburg, Rusija, julij 2018.
- G7. *Analysis of bibliographic networks (workshop 4h)*, NetGloW' 18, Principles behind Structures, Sankt Peterburg, Rusija, julij 2018.
- G8. *Normalization in derived networks*, COMPSTAT 2018, Iași, Romunija, avgust 2018.
- G9. *Social Network Analysis / The evolution of the field*, Applied Statistics 2018, Ribno, Slovenija, september 2018.
- G10. *Citation network analysis of the literature on clustering networks*, COST project CostNet: European Cooperation for Statistics of Network Data Science Conference, Varšava, Poljska, september 2018.
- G11. *Network analysis of bike sharing data*, COST project CostNet: European Cooperation for Statistics of Network Data Science Conference, Varšava, Poljska, september 2018.
- G12. *Complex aggregation of large data sets*, 7th Symbolic Data Analysis workshop 2018, Viana do Castelo, Portugalska, oktober 2018.
- H1. N. Kejžar, S. Korenjak Černe, — , *Razvrščanje simbolnih podatkov z relacijsko omejitvij: demografske strukture po spolu in starosti po Evropi*, Bilt. Stat. Druš. Slov. **40** (2018), št. 61, 39–41.
- II. Network Analysis: Statistical Approaches and modeling. Tečaj na Ma-

- ster's programme "Applied Statistics with Network Analysis", NRU Higher School of Economics, Moskva, Rusija, maj/junij 2018.
- I2. Exploratory Data Analysis. Tečaj na Master's programme "Applied Statistics with Network Analysis", NRU Higher School of Economics, Moskva, Rusija, oktober 2018.
 - I3. Introduction to Social Network Analysis. Tečaj na Master's programme "Applied Statistics with Network Analysis", NRU Higher School of Economics, Moskva, Rusija, december 2018.
 - I4. Vzdrževanje spletne strani CostNet wiki.

Katja Berčič:

- C1. —, J. Vidali, *DiscreteZOO: towards a fingerprint database of discrete objects*, 6th International Conference on Mathematical Software, South Bend, ZDA, julij 2018, Proceedings (Lecture notes in computer science, 10931), 36-44.
- E1. Članica organizacijskega odbora konference *Software Tools for Mathematics*, Morelia, Mehika, januar 2018.
- E2. Članica organizacijskega odbora konference *Symmetries in Graphs, Maps and Polytopes (SIGMAP)*, Morelia, Mehika, junij 2018.
- E3. Članica organizacijskega odbora konference *Software Tools for Mathematics*, Koper, Slovenija, september 2018.
- G1. *Towards databases of theorems*, Software tools for mathematics, Morelia, Mehika, januar 2018.
- G2. *Towards a fingerprint database of discrete objects*, International Congress on Mathematical Software, Notre Dame, ZDA, julij 2018.
- G3. *Interfaces for a repository of discrete mathematical objects*, International Congress on Mathematical Software, Notre Dame, ZDA, julij 2018.

Marko Boben:

- C1. X. Puig, K. Ra, —, J. Li, T. Wang, S. Fidler, A. Torralba, *VirtualHome: Simulating Household Activities via Programs*, IEEE/CVF Conference on Computer Vision and Pattern Recognition, Salt Lake City, ZDA, Junij 2018, Proceedings, 8494–8502.
- D1. Odgovorni urednik revije *Ars Mathematica Contemporanea*.
- D2. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.

Matevž Bren:

- C1. J. Fedran, B. Dobovšek, B. Ažman, — , *Integrity plan: a useful measure for curbing corruption at national and local level*, *Lex* **16** (2018), 167–191.
- C2. M. Klun, — , *Male sex work in Slovenia*, *Varstvoslovje* **20** (2018), 182–201.
- C3. J. Fedran, B. Ažman, — , *Organisational integrity: an important stronghold against corruption*, 12th Biennial International Conference Criminal Justice and Security in Central and Eastern Europe, Ljubljana, september 2018, Conference proceedings, 429–439.
- C4. *Študentska anketa na Univerzi v Mariboru: poti in stranpoti*, 37th International Conference on Organizational Science Development, Portorož, marec 2018, Organizacija in negotovosti v digitalni dobi: konferenčni zbornik, 171–180.
- C5. — , M. Lavrič, *The validity of students' e-evaluation at the University of Maribor*, 21st QMOD-ICQSS Conference, International Conference on Quality and Service Sciences, Cardiff, Velika Britanija, avgust 2018, The quality movement - where are we going? Conference proceedings, 428–432.
- G1. *Organisational integrity: an important stronghold against corruption*, 12th Biennial International Conference Criminal Justice and Security in Central and Eastern Europe, Ljubljana, september 2018.
- G2. *Študentska anketa na Univerzi v Mariboru: poti in stranpoti*, 37th International Conference on Organizational Science Development, Portorož, marec 2018.
- G3. *The validity of students' e-evaluation at the University of Maribor*, 21st QMOD-ICQSS Conference, International Conference on Quality and Service Sciences, Cardiff, Velika Britanija, avgust 2018.
- G4. *Male sexual work in Slovenia*, 18th Annual Conference of the European Society of Criminology, Sarajevo, Bosna in Hercegovina, september 2018.
- G5. *Microwave irradiation enhances misfolding of peptides*, Math/Chem/Comp 2018, 30th MC² conference, Dubrovnik, Hrvaška, junij 2018.
- G6. *Moško spolno delo v Sloveniji*, 19. Dnevi varstvoslovja, Ankaran, junij 2018.
- G7. *Mnenje študentov Fakultete za varnostne vede o zasebnih varnostnikih - primerjava med letoma 2003 in 2017*, 19. Dnevi varstvoslovja, Ankaran, junij 2018.

II. Mentorstvo pri enem diplomskem delu.

Boris Horvat:

- C1. R. Kovačič Lukman, M. Cerinšek, P. Virtič, — , *Improving efficient resource usage and reducing carbon dioxide emissions by optimizing fleet management for winter services*, J. Clean. Prod. **177** (2018), 1–11.
- 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. *Digital Marine Transformation in the CargoX Case*, Supply Chain Management in Science and Practice 2018, Portorož, april 2018.
- G2. *Okrogla miza Izzivi nove kripto ekonomije*, Dogodki Blockchain Think Tank Slovenia, Ljubljana, oktober 2018.

Gašper Jaklič:

- C1. — , J. Kozak, *On parametric polynomial circle approximation*, Numer. Algorithms **77** (2018), 433–450.
- F1. *Introduction to numerical methods*, PhD Course “Applied and Computational Mathematics in Engineering Application”, Universidade de Aveiro, Portugalska, marec 2018.
- G1. *Circle arc approximation by parametric polynomials*, 9th International Conference on Curves and Surfaces, Arcachon, Francija, junij 2018.
- G2. *Circle arc approximation by parametric polynomials*, 9th Conference on Applied Mathematics and Scientific Computing, Šibenik, Hrvaška, september 2018.
- II. 12 recenziji za MathSciNet.
- II. Mentorstvo pri 2 delih diplomskega seminarja.

Matjaž Konvalinka:

- B1. *A bijective proof of the hook-length formula for skew shapes*, sprejeto v objavo v *European J. Combin.*
- C1. S. C. Billey, T. K. Peterson, — , W. Slofstra, B. Tenner, *Parabolic double cosets in Coxeter groups*, *Electron. J. Combin.* **25** (2018), art. P1.23, 66 strani.
- C2. F. A. Matsen, S. C. Billey, A. Kas, — , *Tanglegrams: a reduction tool for mathematical phylogenetics*, *EEE/ACM Trans. Comput. Biol. Bioinform.* **15** (2018), 343–349.
- C3. *A bijective proof of the hook-length formula for skew shapes*, 30th International Conference on “Formal Power Series and Algebraic Combinatorics”, Hanover, New Hampshire, ZDA, julij 2018, Conference Proceedings (Séminaire Lotharingien de Combinatoire, 80B, 12 str.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D2. Področni urednik revije *Discrete Mathematics & Theoretical Computer Science*.
- F1. *A bijective proof of the hook-length formula for skew shifted shapes*, vabljeno predavanje, Pacific Northwest Combinatorics Day, Seattle, Washington, ZDA, marec 2018.
- G1. *A bijective proof of the hook-length formula for skew shapes*, 30th International Conference on “Formal Power Series and Algebraic Combinatorics”, Hanover, New Hampshire, ZDA, julij 2018.
- G2. *A bijective proof of the hook-length formula for skew shifted shapes*, Enumerative combinatorics workshop, Oberwolfach, Nemčija, maj 2018.

Simona Korenjak-Černe:

- A1. — , L. Simpson, *Latin America age structure 1960-2011 = Estructura etaria en América Latina, 1960-2010*, poglavje v *¿Convergencia demográfica? : análisis comparativo de las tendencias demográficas subnacionales en América Latina y el Caribe*, str. 85–107, Asociación Latinoamericana de Población, Rio de Janeiro, Brazilija, 2018.
- G1. *Analysis of sex-age-cause specific mortality in European countries*, 5th Stochastic Modeling Techniques and Data Analysis International Conference with Demographics Workshop, Chania, Kreta, Grčija, junij 2018.

- G2. *Measuring statistical relation between non-ordinal bar chart symbolic variable*, Symbolic data analysis workshop, Viana do Castelo, Portugalska, oktober 2018.
- G3. *Analysis of gender-age-cause-specific mortality in European Countries with SYR software*, Symbolic data analysis workshop, Viana do Castelo, Portugalska, oktober 2018.
- H1. N. Kežžar, —, V. Batagelj, *Razvrščanje simbolnih podatkov z relacijsko omejitvijo: demografske strukture po spolu in starosti po Evropi*, Bilt. Stat. Druš. Slov. **40** (2018), št. 61, 39–41.
- I1. Soavtorica enega univerzitetnega učbenika.

Jurij Kovič:

- B1. *Regular polygonal systems*, sprejeto v objavo v *Ars Math. Contemp.*
- C1. J. Bokowski, —, T. Pisanski, A. Žitnik, *Combinatorial configurations, quasiline arrangements, and systems of curves on surfaces*, *Ars Math. Contemp.* **14** (2018), 97–111.
- D1. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.
- D2. Tehnični urednik revije *Ars Mathematica Contemporanea*.
- H1. —, A. Simonič, *Trikotnika v trikotniku*, *Presek* **46** (2018), št. 3, 4–7.
- I1. 3 recenzije za MathSciNet, 2 recenziji za Obzornik za matematiko in fiziko.

Alen Orbanič:

- C1. L. Novak, T. Bajcar, B. Širok, —, B. Bizjan, *Investigation of vortex shedding from an airfoil by CFD simulation and computer-aided flow visualization*, *Therm. Sci.* **22** (2018), 3023–3033.
- D1. Tehnični urednik revije *Ars Mathematica Contemporanea*.
- D2. Tehnični urednik revije *The Art of Discrete and Applied Mathematics*.
- D3. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>
- I1. Mentorstvo pri enem magistrskem delu, enem delu diplomskega seminarja ter somentorstvo pri enem magistrskem delu in enem delu diplomskega seminarja.

Marko Petkovšek:

- 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*.

- F1. *Definite sums as solutions of linear recurrence equations*, 50-minutno vabljeno predavanje, Combinatorics, Special Functions and Computer Algebra: a workshop at the occasion of Peter Paule's 60th birthday, Hagenberg, Avstrija, maj 1918.

- G1. *Definite sums as solutions of linear recurrence equations*, Functional Equations in Limoges (FELIM), Francija, marec 2018.

Tomaz Pisanski:

- C1. J. Bokowski, J. Kovič, — , A. Žitnik, *Combinatorial configurations, quasiline arrangements, and systems of curves on surfaces*, *Ars Math. Contemp.* **14** (2018), 97–116.
- C2. *Not every bipartite double cover is canonical*, *Bull. Inst. Combin. Appl.* **82** (2018), 51–55.
- C3. N. Bašić, P. W. Fowler, — , *Stratified enumeration of convex benzenoids*, *MATCH Commun. Math. Comput. Chem.* **80** (2018), 153–172.

- D1. Sourednik zbornika *Non-commutative structures: a workshop in honor of Jonathan Leech*, Portorož, maj 2018.
- D2. Glavni in odgovorni urednik revije *Ars Mathematica Contemporanea*.
- D3. Ustanovni in glavni urednik revije *The Art of Discrete and Applied Mathematics*.
- D4. Član uredniškega sveta revije *Logika & razvedrilna matematika*.
- D3. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>

- G1. *Oriented faces of a polytope as a noncommutative lattice*, *Non-commutative structures: a workshop in honor of Jonathan Leech*, Portorož, maj 2018.

- G2. *Isomorphisms and automorphisms of antilattices*, Non-commutative structures: a workshop in honor of Jonathan Leech, Portorož, maj 2018.
- G3. *Characterization of generalized Petersen graphs that are Kronecker covers*, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.

Bor Plestenjak:

- C1. A. Buckley, —, *Explicit determinantal representations of up to quintic bivariate polynomials*, Linear Multilinear Algebra **66** (2018), 2266–2285.
- G1. *Subspace methods for three-parameter eigenvalue problems*, Numerical Analysis and Scientific Computation with Applications (NASCA), Kalamata, Grčija, julij 2018.
- I1. Mentorstvo pri 2 magistrskih delih.

Primož Potočnik:

- C1. —, S. Wilson, *Linking rings structures and semisymmetric graphs: combinatorial constructions*, Ars Math. Contemp. **15** (2018), 1–17.
- C2. B. Kuzman, A. Malnič, —, *Tetravalent vertex- and edge-transitive graphs over doubled cycles*, J. Combin. Theory Ser. B **131** (2018), 109–137.
- D1. Član uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D2. Urednik revije *The Art of Discrete and Applied Mathematics*.
- D2. Član uredniškega odbora spletne enciklopedije *Encyclopedia of graphs*, <http://atlas.gregas.eu>
- F1. *Controlling the automorphism group of a covering graph*, vabljeno predavanje, International Workshop on Symmetries of Graph and Networks, Sanya, Kitajska, januar/februar 2018.
- F2. *On reflexible polynomials*, vabljeno predavanje, International Workshop on Symmetries of Graph and Networks, Sanya, Kitajska, januar/februar 2018.
- F3. *On orders of vertex-stabilizers in arc-transitive graphs*, vabljeno predavanje, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.

- F4. *On reflexible polynomials*, vabljeno predavanje, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.
- F5. *Two problems about symmetries of finite graphs*, vabljeno predavanje, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.
- G1. *Classification of vertex-transitive digraphs via automorphism group*, Graphs, groups, and more: celebrating Brian Alspach's 80th and Dragan Marušič's 65th birthdays, Koper, maj/junij 2018.
- II. Recenzija enega univerzitetnega učnega gradiva.

Arjana Žitnik:

- B1. P. Terwilliger, —, *The quantum adjacency algebra and subconstituent algebra of a graph*, sprejeto v objavo v J. Combin. Theory Ser. A.
- C1. J. Bokowski, J. Kovič, T. Pisanski, —, *Combinatorial configurations, quasiline arrangements, and systems of curves on surfaces*, Ars Math. Contemp. **14** (2018), 97–116.
- D1. Članica uredniškega odbora revije *Ars Mathematica Contemporanea*.
- D2. Članica uredniškega odbora revije *The Art of Discrete and Applied Mathematics*.
- G1. *Chiral astral realizations of cyclic 3-configurations*, International Workshop on Symmetries of Graphs and Networks, Sanya, Kitajska, januar/februar 2018.
- II. Mentorstvo pri 2 diplomskih delih.

TUJI GOSTI

Oddelek za teoretično računalništvo je v letu 2018 gostil:

Michiela Hochstenbacha, 3 tedne, Technische Universiteit Eindhoven, Nizozemska, marec/april 2018, na povabilo Bora Plestenjaka.

GOSTOVANJA

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

Marko Boben, 1 mesec, University of Toronto, Kanada, januar 2018,

Matjaž Konvalinka, 6 tednov, University of Washington, Seattle, Washington, ZDA, marec/april 2018,

Matjaž Konvalinka, 3 tedne, Université Paris Diderot, Pariz, Francija, junij 2018,

Bor Plestenjak, 7 dni, Koç Üniversitesi, Istanbul, Turčija, september 2018.

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 2018 se je zvrstilo 27 sestankov, na katerih je bilo v povprečju po 8 poslušalcev.

Barbara Ikica, *Clustering via a Modified Perford-Welsh Algorithm*, 9. 1.,

Matjaž Konvalinka, *Asimptotska normalnost indeksa maj na standardnih Youngovih tabelah*, 2. del, 16. 1.,

Valentin Gledel, *Maker-Breaker Domination Game*, 27. 2.,

Sergio Cabello, *Barrier resilience in wireless sensor networks*, 6. 3.,

Micael Toledo, *On cubic vertex-transitive tricirculants*, 13. 3.,

Riste Škrekovski, *Some results on unique-maximum coloring of plane graphs*, 20. 3.,

Tomaž Pisanski, *Isomorphisms and automorphisms of finite antilattices*, 27. 3.,

Janoš Vidali, *Using symbolic computation to prove nonexistence of distance-regular graphs*, 3. 4.,

Tilen Marc, *Machine learning on graphs*, 17. 4.,

Tomaž Pisanski, *Convexity deficit of benzenoid graphs*, 24. 4.,

- Matjaž Konvalinka**, *Besede Smirnova, drevesa Smirnova in e-pozitivnost*, 8. 5.,
- Janoš Vidali**, *Triple intersection numbers of Q -polynomial association schemes*, 15. 5.,
- Bojan Mohar**, *The genus of a random bipartite graph*, 22. 5.,
- Vladimir Batagelj**, *Razvoj diskretne matematike in računalništva pri nas*, 1. del, 18. 9.,
- Andreja Tepavčević**, *Partial closure operators and systems and applications to various classes of partial ordered sets*, 25. 9.,
- Bojan Mohar**, *Trees determined by the distances between their leaves*, 2. 10.,
- Riste Škrekovski**, *Nekaj rezultatov o enolično-maksimalnem barvanju ravninskih grafov*, 9. 10.,
- Janoš Vidali**, *On tight 4-designs in Hamming association schemes*, 16. 10.,
- Vladimir Batagelj**, *Razvoj diskretne matematike in računalništva pri nas*, 2. del, 23. 10.,
- Vladimir Batagelj**, *Razvoj diskretne matematike in računalništva pri nas*, 3. del, 30. 10.,
- Vladimir Batagelj**, *Razvoj diskretne matematike in računalništva pri nas*, 4. del, 6. 11.,
- Vladimir Batagelj**, *Razvoj diskretne matematike in računalništva pri nas*, 5. del, 13. 11.,
- Micael Toledo**, *Cubic graphs with long orbits*, 20. 11.,
- Tomaž Pisanski**, *Regular nut graphs and the Fowler extension*, 27. 11.,
- Vesna Iršič**, *Total domination game*, 4. 12.,
- Tilen Marc**, *A graph theoretical approach towards some open problems about oriented matroids*, 11. 12.,
- Arjana Žitnik**, *The Sierpiński product of graphs*, 18. 12.

Seminar za temelje matematike in teoretično računalništvo

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

- Matija Pretnar**, *Explicit effect subtyping*, 9. 1.,
- Alex Simpson**, *Contextual equivalence for algebraic effects under call-by-value, illustrated using combined probability and nondeterminism*, 18. 1.,

- Niels Voorneveld**, *Behavioural equivalence via modalities for algebraic effects*, 15. 2.,
- Andrej Bauer**, *An introduction to categorical logic*, 22. 2.,
- Andrej Bauer**, *Introduction to categorical logic*, 2. del, 8. 3.,
- Niels van der Weide**, *Construction of certain higher-inductive types as colimits*, 15. 3.,
- Andrej Bauer**, *All metric spaces are separable*, 22. 3.,
- Matija Pretnar**, *Odstopajoči obhodi / Quirky traversals*, 12. 4.,
- Matija Pretnar**, *Prestrezniki algebrajskih učinkov*, 9. 5. ,
- Danel Ahman**, *A fibrational view on computational effects*, 31. 5.,
- Matteo Mio**, *Axiomatisation of Probabilistic Logics*, 26. 6.,
- Matija Pretnar**, *Logika z lokalnimi algebrajskimi teorijami*, 1. 8.,
- Anja Petković**, *On computing simultaneous fixed points of monotone piecewise linear functions*, 13. 9.,
- David Ellerman**, *A graph-theoretic algorithm to define any Boolean operation on set partitions*, 20. 9.,
- Anja Petković**, *On computing simultaneous fixed points of monotone piecewise linear functions*, 2. del, 4. 10.,
- Danel Ahman**, *Directed Containers (or monoids, actions, dependent types, and more)*, 11. 10.,
- Zvonko Iljazović**, *Computable topological type*, 18. 10.,
- Alex Simpson**, *Synthetic probability theory*, 25. 10.,
- Philipp Georg Haselwarter**, *Andromeda 2.0*, 8. 11.,
- Gavin Bierman**, *Future directions for Java*, 15. 11.,
- Edward William Ayers**, *Human-like automated reasoning*, 22. 11.,
- Žiga Lukšič**, *Types with local algebraic theories*, 29. 11.,
- Gavin Bierman**, *The Wonder of Cricket*, 6. 12.,
- Alex Simpson**, *Programming with Streams of Correlated Random Variables*, 20. 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://vldowiki.fmf.uni-lj.si/doku.php?id=vlado:pub:sreda>.

Seminar se sestaja ob sredah ob 18. uri.

V letu 2018 so se zvrstila naslednja predavanja (1280–1283):

Razgovor, *Podatki za izziv za NetSlo'19*, 10. 1.,

Marjan Cugmas, *Središčno-koheziivni tip bločnega modela v omrežjih interakcij med predšolskimi otroki*, 17. 1.,

Daria Maltseva, Vladimir Batagelj, *Social Network Analysis: Bibliographic Network Analysis of the Field and its Evolution*, 21.11.,

Daria Maltseva, Vladimir Batagelj, *Social Network Analysis: Bibliographic Network Analysis of the Field and its Evolution; Part 2: Temporal analyses*, 28.11.

Seminar za zgodovino matematičnih znanosti

Seminar za zgodovino matematičnih znanosti, ki ga vodi Jurij Kovič, je v koledarskem letu 2018 potekal ob ponedeljkih od 14.15 do 16.00 na Fakulteti za matematiko in fiziko v Plemljevem seminarju na Jadranski 19 v Ljubljani. Imeli smo 26 srečanj, povprečno število poslušalcev je bilo 8.

Več o delu seminarja in posameznih predavanjih lahko izveste na spletni strani seminarja:

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

Teme posameznih predavanj so bile:

Marko Razpet, *Plemljev profesor Vincenc Borštner (1843-1917)*, 8. 1. (2 uri),

Izidor Hafner, Vito Lampret, *Akademik prof. dr. Ivan Vidav (1918-2015)*, 15. 1. (2 uri),

Milan Hladnik, *Šolanje in študij profesorja Vidava*, 22. 1. (2 uri),

Jurij Kovič, *Bertrand Russell (1872-1970) – življenje in delo*, 19. 2. (2 uri),

Vito Lampret, *Razlika med Riemannovim integralom in njegovo integralsko vsoto pri ekvidistantni delitvi integracijskega intervala*, 26. 2. (2 uri),

Izidor Hafner, *Kaj je elementarna geometrija?*, 5. 3. (2 uri),

Jurij Kovič, *Konfiguracije – zgodovina in teorija*, 12. 3. (2 uri),

Milan Hladnik, *Ljubljanska univerza v prvih desetih letih obstoja*, 19. 3. (2 uri),

Nada Razpet, *Konstrukcije samo s šestilom*, 26. 3. (2 uri),

Marko Razpet, *Matematik Leopold Vietoris - najdalj živeči Avstrijec*, 9. 4. (2 uri),

Jurij Kovič, *H. S. M. Coxeter (1907-2003) – življenje in delo*, 16. 4. (2 uri),

- Milena Strnad in Aleksander Simonič v sodelovanju z indijsko ambasado**, *Poklon velikemu matematiku Ramanujanu ob 98. obletnici njegove smrti*, 23. 4. (2 uri),
- Aleksander Simonič**, *Vpogled v najpomembnejša Ramanujanova dela*, 7. 5. (2 uri),
- Nada Razpet**, *Geometrijske konstrukcije s palčkami*, 14. 5. (2 uri),
- Barbara Ikica**, *(Evolucijska) teorija iger*, 21. 5. (2 uri),
- Marko in Nada Razpet**, *Letošnji, 14. avstrijski simpozij o zgodovini matematike – vtisi*, 28. 5. (2 uri),
- Marko Razpet**, *Vincenc Borštner in Josip Plemelj v starih zapisih*, 8. 10. (2. uri),
- Marko Razpet**, *Prof. Josip Plemelj in meteor*, 15. 10. (2 uri),
- Jurij Kovič**, *Indukcija v matematiki*, 22. 10. (2 uri),
- Aleksander Simonič**, *A. J. Lexell in sferna geometrija*, 5. 11. (2 uri),
- Jurij Kovič**, *Odkritja v matematiki*, 12. 11. (2 uri),
- Peter Legiša**, *Plemljeva recenzija učbenikov Močnik-Zahradniček iz leta 1910*, 19. 11. (2 uri),
- Marko Razpet**, *Prof. Josip Plemelj in univerza*, 26. 11. (2 uri),
- Jurij Kovič**, *Simetrija v matematiki*, 3. 12. (2 uri),
- Jurij Kovič**, *Cardanova "Ars Magna"*, 10. 12. (2 uri),
- Marko Razpet**, *Gustav von Escherich - Plemljev mentor*, 17. 12. (2 uri).

MATEMATIČNI KOLOKVIJI

Matematični kolokviji in Javna predavanja DMFA na Fakulteti za matematiko in fiziko Univerze v Ljubljani so praviloma ob četrtek 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 2018 so se zvrstila naslednja predavanja:

19. april 2018

Aleksey Kostenko

Univerza v Ljubljani, Slovenija

JACOBI POLYNOMIALS AND THE DISCRETE LAGUERRE OPERATOR

17. maj 2018

Lajos Molnar

University of Szeged, Madžarska

ISOMETRIES AND ISOMORPHISMS

26. junij 2018

Yuval Roichman

Bar-Ilan University, Izrael

FROM PERMUTATION STATISTICS TO GRADED ALGEBRAS AND BACK

28. junij 2018

Valerij Romanovskij

Univerza v Mariboru, Slovenija

NEKATERI PROBLEMI TEORIJE NAVADNIH DIFERENCIALNIH ENAČB

18. december 2018

Emil Žagar

Univerza v Ljubljani, Slovenija

APROKSIMACIJA KROŽNIH LOKOV

MATEMATIČNA KNJIŽNICA

Z BIBLIOGRAFSKIM ODDELKOM

V letu 2018 je v knjižnico tekoče prihajalo 116 naslovov matematičnih revij, od tega smo v zameno prejeli zvezke iz 24 naslovov in kot dar 13 naslovov. Na ta način smo pridobili 273 enot.

Pri knjigah smo pridobili 337 novih naslovov (od tega 2 doktorata, 43 magistrjev in 60 zaključnih del študentov 1. stopnje Bolonjskega študija). Skupaj smo pridobili 366 knjižnih enot (107 iz nakupa, 155 kot dar, ostalo so obvezni izvodi). Zaradi optimizacije izposoje smo v Matematično knjižnico prenesli nekaj gradiva iz Knjižnice za mehaniko.

V letu 2018 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 2018 smo v sistem COBISS vnesli 318 zapisov monografij in zbornikov, 739 bibliografskih zapisov člankov in recenzij, ter 112 zapisov izvedenih del. Vso literaturo, ki jo hranimo v knjižnici lahko najdete preko sistema COBISS+.

V letu 2018 je imela naša knjižnica približno 1.000 aktivnih članov. Obiskov v knjižnici je bilo 6.204, preko sistema COBISS+ oz. mCOBISS pa še 11.035. Za potrebe izposoje smo opravili 14.306 transakcij. Med obiskovalci knjižnice je še vedno največ študentov, predvsem tistih, ki študirajo na naši fakulteti. Preko medknjižnične izposoje smo v tem letu posredovali 47 enot.

Tudi v letu 2018 so konzorcij za nakup matematične baze podatkov *MathSciNet* (<http://www.ams.org/mathscinet/>) sestavljale tri slovenske univerze. 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+ (katalog ali drugi informacijski viri). Kot že nekaj let, smo tudi v letu 2018 v knjižnici pripravili

tudi po abecedi oz. velikosti faktorja vpliva urejeno verzijo seznama revij s faktorjem vpliva 2017 za 17 kategorij.

Knjižnico financirata Oddelek za matematiko Fakultete za matematiko in fiziko Univerze v Ljubljani 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 2018 objavila svoj 14. in 15. letnik v štirih številkah.

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