

**Slovenská technická univerzita v Bratislave**

## **Publikačná činnosť**

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## Články v časopisoch

- AGAHI, H. – MESIAR, R. – BABAKHANIA, A. Generalized expectation with general kernels on g-semirings and its applications. *Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas*, 111. s. 863–875.
- AGAHI, H. – MESIAR, R. Probability inequalities for decomposition integrals. *Journal of Computational and Applied Mathematics*, 315. s. 240–248.
- ARAUJO-PARDO, G. – BALBUENA, C. – MILLER, M. – ŽDÍMALOVÁ, M. A family of mixed graphs with large order and diameter 2. *Discrete Applied Mathematics*, 2018. s. 57–63.
- ARIAS-GARCÍA, J D J. – MESIAR, R. – DE BAETS, B. The unwalked path between quasi-copulas and copulas: Stepping stones in higher dimensions. *International Journal of Approximate Reasoning*, 80. s. 89–99.
- BACIGÁL, T. – ŽDÍMALOVÁ, M. Convergence of linear approximation of Archimedean generator from Williamson's transform in examples. *Tatra Mountains Mathematical Publications*, 69. s. 1–18.
- BACZYŃSKI, M. – BUSTINCE, H. – MESIAR, R. Aggregation Functions: Theory and applications, Part I: Editorial. *Fuzzy Sets and Systems*, 324. s. 1–2.
- BACZYŃSKI, M. – BUSTINCE, H. – MESIAR, R. Aggregation functions: Theory and applications, Part II: Editorial. *Fuzzy Sets and Systems*, 325. s. 1–3.
- BACZYŃSKI, M. – GRZEGORZEWSKI, P. – MESIAR, R. – HELBIN, P. – NIEMYSKA, W. Fuzzy implications based on semicopulas. *Fuzzy Sets and Systems*, 323. s. 138–151.
- BACZYŃSKI, M. – JAYARAM, B. – MESIAR, R. Preface/Editorial: Special issue of Acta Polytechnica Hungarica linked to ISCAMI 2016. *Acta Polytechnica Hungarica*, 14. s. 7–9.
- BACHRATÝ, M. – JAJCAY, R. Classification of coset-preserving skew-morphisms of finite cyclic groups. *Australasian journal of combinatorics*, 67. s. 259–280.
- BACHRATÝ, M. – ŠIAGIOVÁ, J. – ŠIRÁŇ, J. Revisiting Constructions of Large Cayley Graphs of Given Degree and Diameter from Regular Orbits. *Journal of Interconnection Networks*, 17. s. 3–4.
- BISWAKARMA, R. – BORKOTOKEY, S. – MESIAR, R. A simplified expression of share functions for cooperative games with fuzzy coalitions. *Tatra Mountains Mathematical Publications*, 69. s. 19–34.
- BODJANOVA, S. – KALINA, M. Block-wise construction of commutative increasing monoids. *Fuzzy Sets and Systems*, 324. s. 91–99.
- BOKAL, D. – MOHAR, B. – ŠIRÁŇ, J. Dan Archdeacon (11 May 1954 to 18 February 2015). *Ars Mathematica Contemporanea*, 12. s. 2017.
- BONAMY, M. – KNOR, M. – LUŽAR, B. – PINLOU, A. – ŠKREKOVSKI, R. On the difference between the Szeged and the Wiener index. *Applied Mathematics and Computation*, 312. s. 202–213.
- BONNINGTON, C P. – DINITZ, J H. – ŠIRÁŇ, J. Special Issue in Honour of Dan S. Archdeacon. *Australasian journal of combinatorics*, 67. s. 65–76.
- BUSTINCE, H. – BELIAKOV, G. – DIMURO, G P. – BEDREGAL, B R C. – MESIAR, R. On the definition of penalty functions in data aggregation. *Fuzzy Sets and Systems*, 323. s. 1–18.
- DAS, S. – GUHA, D. – MESIAR, R. Extended Bonferroni Mean Under Intuitionistic Fuzzy Environment Based on a Strict t-Conorm. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, 47. s. 2083–2099.
- DIBALA, M. – VAVRÍKOVÁ, L. A note on Archimax copulas and their representation by means of conic copulas. *Fuzzy Sets and Systems*, 308. s. 123–132.
- DYBALLA, S. – SAVY, T. – GERMANN, P. – MIKULA, K. – REMEŠÍKOVÁ, M. – ŠPIR, R. – ZECCA, A. – PEY-RIÉRAS, N. – PUJADES, C. Distribution of neurosensory progenitor pools during inner ear morphogenesis unveiled by cell lineage reconstruction. *eLife*, 6. s. 2017.
- ELDER, J. – SIMMONS, C T. – DIERSCH, H. – FROLKOVIČ, P. – HOLZBECHER, E. – JOHANNSEN, K. The Elder Problem. *Fluids*, 2. s. 2017.
- HAHN, J. – MIKULA, K. – FROLKOVIČ, P. – BASARA, B. Inflow-Based Gradient Finite Volume Method for

- a Propagation in a Normal Direction in a Polyhedron Mesh. *Journal of Scientific Computing*, 72. s. 442–465.
- HALAŠ, R. – MESIAR, R. – MONTERO, J. Editorial of FSTA 2016. *Fuzzy Sets and Systems*, 326. s. 1–2.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. Description of sup- and inf-preserving aggregation functions via families of clusters in data tables. *Information Sciences*, 400. s. 173–183.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. Generalized comonotonicity and new axiomatizations of Sugeno integrals on bounded distributive lattices. *International Journal of Approximate Reasoning*, 81. s. 183–192.
- HANDLOVIČOVÁ, A. Stability estimates for discrete duality finite volume scheme for Heston model. *Computer methods in materials science*, 17. s. 101–110.
- HRIŇÁKOVÁ, K. – HRIŇÁK, M. Dolina smrti. *Mladý vedec*, s. 2–6.
- HRIŇÁKOVÁ, K. Kružnice, špirály a ruže v polárnych súradniciach. *MATMIX*, 23. s. 18–21.
- HRIŇÁKOVÁ, K. Úlohy o prehýbaní štvorca. *MATMIX*, 23. s. 13–16.
- CHEN, T. – MESIAR, R. – LI, J. – STUPŇANOVÁ, A. Possibility and necessity measures and integral equivalence. *International Journal of Approximate Reasoning*, 86. s. 62–72.
- JAROLÍMEK, I. – ŠIBÍKOVÁ, M. – ZALIBEROVÁ, M. – MÁJEKOVÁ, J. – BACIGÁL, T. – MEDVECKÁ, J. Dynamics of alluvial grasslands: a 25-year study on the Morava river (Slovakia). *PHYTON – Annales Rei Botanicae*, 57. s. 91–106.
- JENČOVÁ, A. – JENČA, G. On Monoids in the Category of Sets and Relations. *International Journal of Theoretical Physics*, 56. s. 3757–3769.
- JIN, L. – KALINA, M. – MESIAR, R. – QIAN, G. On Some Properties and Comparative Analysis for Different OWA Monoids. *International Journal of Intelligent Systems*, 32. s. 1115–1135.
- JIN, L. – KALINA, M. – QIAN, G. Discrete and continuous recursive forms of OWA operators. *Fuzzy Sets and Systems*, 308. s. 106–122.
- JIN, L. – MESIAR, R. The Metric Space of Ordered Weighted Average Operators with Distance Based on Accumulated Entries. *International Journal of Intelligent Systems*, 32. s. 665–675.
- KARACAL, F. – ERTUGRUL, Ü. – MESIAR, R. Characterization of uninorms on bounded lattices. *Fuzzy Sets and Systems*, 308. s. 54–71.
- KARACAL, F. – MESIAR, R. Aggregation functions on bounded lattices. *International Journal of General Systems*, 46. s. 37–51.
- KLEMENT, E P. – KOLESÁROVÁ, A. – MESIAR, R. – SAMINGER-PLATZ, S. On the role of ultramodularity and Schur concavity in the construction of binary copulas. *Journal of Mathematical Inequalities*, 11. s. 361–381.
- KNOR, M. – KRANJC, J. – ŠKREKOVSKI, R. – TEPEH, A. On the minimum value of sum-Balaban index. *Applied Mathematics and Computation*, 303. s. 203–210.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. A Note on Accumulation Points of Balaban index. *MATCH*, 78. s. 163–168.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – BACIGÁL, T. – NGUYEN, C. Multidimensional copula models for parallel development of the US bond market indices. *Tatra Mountains Mathematical Publications*, 69. s. 61–73.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – KALICKÁ, J. Dependence measures for perturbations of copulas. *Fuzzy Sets and Systems*, 324. s. 100–116.
- KOPÁNI, M. – FILOVÁ, B. – ŠEVČÍK, P. – KOSNÁČ, D. – MISEK, J. – POLÁK, Š. – KOHAN, M. – MAJOR, J. – ŽDÍMALOVÁ, M. – JAKUŠ, J. Iron deposition in rabbit cerebellum after exposure to generated and mobile GSM electromagnetic fields. *Bratislava Medical Journal*, 118. s. 575–579.
- KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. A note on the super-additive and sub-additive transformations of aggregation functions: The multi-dimensional case. *Kybernetika*, 53. s. 129–136.
- KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. On some transformations of fuzzy measures. *Tatra Mountains Mathe-*

## Články v časopisoch

- matical Publications, 69. s. 75–86.
- KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. Ordered Weighted Averaging Operators and their Generalizations with Applications in Decision Making. *Iranian Journal of Operations Research*, 8. s. 48–57.
- KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. – ŠIRÁŇ, J. Aggregation functions with given super-additive and sub-additive transformations. *International Journal of General Systems*, 46. s. 225–234.
- MEDVECKÁ, S. – IVÁNKOVÁ, O. – MACÁK, M. Pressure Coefficients Acting upon the Cylinder Obtained by Numerical and Experimental Analysis. *Civil and environmental engineering*, 13. s. 149–155.
- MESIAR, R. – KOLESÁROVÁ, A. Aggregation and related functions in fuzzy set theory: dualities and monotonicity-based generalizations. *Journal of Automation, Mobile Robotics and Intelligent Systems*, 11. s. 58–61.
- MESIAR, R. – KOUCHAKINEJAD, F. – MASHINCHI, M. Parameters of Fuzzy Bags. *Journal of Fuzzy Set Valued Analysis*, 2017. s. 120–131.
- MESIAR, R. – LI, J. – OUYANG, Y. On the equality of integrals. *Information Sciences*, 393. s. 82–90.
- MINÁROVÁ, M. Radiation of heat in an insulating vacuum layer. *Tatra Mountains Mathematical Publications*, 69. s. 87–100.
- OUYANG, Y. – LI, J. – MESIAR, R. Coincidences of the Concave Integral and the Pan-Integral. *Symmetry*, 9. s. 2017.
- OUYANG, Y. – LI, J. – MESIAR, R. On linearity of pan-integral and pan-integrable functions space. *International Journal of Approximate Reasoning*, 90. s. 307–318.
- OUYANG, Y. – LI, J. – MESIAR, R. On the equivalence of the Choquet, pan- and concave integrals on finite spaces. *Journal of Mathematical analysis and applications*, 456. s. 151–162.
- PEKSOVÁ SZOLGAYOVÁ, E. – DANÁČOVÁ, M. – KOMORNÍKOVÁ, M. – SZOLGAY, J. Hybrid forecasting of daily river discharges considering autoregressive heteroscedasticity. *Slovak Journal of Civil Engineering*, 25. s. 39–48.
- RIEČANOVÁ, I. – HANDLOVIČOVÁ, A. Acoustic simulations based on FVM solution of the Helmholtz equation. *Acta Polytechnica Hungarica*, 14. s. 139–150.
- SAMINGER-PLATZ, S. – DIBALA, M. – KLEMENT, E P. – MESIAR, R. Ordinal sums of binary conjunctive operations based on the product. *Publicationes Mathematicae Debrecen*, 91. s. 63–80.
- SOKOL, M. – KOMORNÍKOVÁ, M. – BACIGÁL, T. – RODRÍGUEZ PAZ, M X. The Approximation Function of Bridge Deck Vibration Derived from the Measured Eigenmodes. *International Journal of Applied Mathematics and Computer Science*, 27. s. 799–814.
- SZATMÁRI, D. – VAJSÁBLOVÁ, M. – MOJŠOVÁ, D. Application of Evaluation Criteria to Cartographic Projections. *Acta Polytechnica Hungarica*, 14. s. 11–28.
- ŠIBÍKOVÁ, M. – BACIGÁL, T. – JAROLÍMEK, I. Fragmentation of hardwood floodplain forests – how does it affect species composition?. *Community Ecology*, 18. s. 97–108.
- ŠIPOŠOVÁ, A. – ŠIPEKY, L. – RINDONE, F. – GRECCO, S. – MESIAR, R. Super- and subadditive constructions of aggregation functions. *Information Fusion*, 34. s. 49–54.
- ŠIPOŠOVÁ, A. – ŠIPEKY, L. – ŠIRÁŇ, J. On the existence of aggregation functions with given super-additive and sub-additive transformations. *Fuzzy Sets and Systems*, 324. s. 117–126.
- ŠPIR, R. – MIKULA, K. – PEYRIERAS, N. Parallelization and validation of algorithms for Zebrafish cell lineage tree reconstruction from big 4D image data. *Acta Polytechnica Hungarica*, 14. s. 65–84.
- ŽDÍMALOVÁ, M. – ROŽNOVJAK, R. – WEISMANN, P. – EL FALOUGY, H. – KUBÍKOVÁ, E. Use of graph algorithms in the processing and analysis of images with focus on the biomedical data. *Bratislava Medical Journal*, 118. s. 485–490.

**Monografie, učebnice, skriptá, príručky, normy, patenty, výskumné správy, iné neperiodické publikácie**

BALAŽOVJECH, M. *Fyzikálne princípy v počítačovom modelovaní 1.* Bratislava: Spektrum STU, 2017. ISBN 978-80-227-4721-9.

VAVRÍKOVÁ, L. – ŽDÍMALOVÁ, M. *Cvičenia z matematiky I: riešené príklady.* Bratislava : Spektrum STU, 2017. 215 s. ISBN 978-80-227-4693-9.

## Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty

- AMBROZ, M. – BALAŽOVJECH, M. – MEDĽA, M. – MIKULA, K. Numerical modelling of forest fire propagation. In *ACOMEN 2017*. Ghent: Ghent University, 2017, s. 73–74. ISBN 978-94-6197-560-7.
- AMBROZ, M. – BALAŽOVJECH, M. – MEDĽA, M. – MIKULA, K. Numerical modelling of wildland forest fire propagation. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 304. ISBN 978-80-227-4710-3.
- AMBROZ, M. – MIKULA, K. Asymptotically uniform redistribution of a curve points on a surface. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 14–19. ISBN 978-80-227-4751-6.
- ARIAS-GARCÍA, J D J. – DE MEYER, H. – MESIAR, R. – DE BAETS, B. Intermediate classes between quasi-copulas and copulas in higher dimensions. In *Copulas and Their Applications*. Almería: Universidad de Almería, 2017, s. 22. ISBN 978-84-697-4075-0.
- BACIGÁL, T. Some open problems in statistical interpretation of Williamson's n-transform. In *Copulas and Their Applications*. Almería: Universidad de Almería, 2017, s. 23. ISBN 978-84-697-4075-0.
- BACZYŃSKI, M. – DRYGAŚ, P. – KRÓL, A. – MESIAR, R. New Types of Ordinal Sum of Fuzzy Implications. In *FUZZ-IEEE 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-6034-4.
- BALAŽOVJECH, M. – FROLKOVIČ, P. – MIKULA, K. The second order scheme and exact solution for advection-diffusion level set equation. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 305. ISBN 978-80-227-4710-3.
- BALAŽOVJECH, M. – FROLKOVIČ, P. – MIKULA, K. The second order scheme for advection-diffusion level set equation. In *Workshop on scientific computing 2017*. Praha: Department of Mathematics FNSPE CTU in Prague, 2017, s. 1.
- BALLOVÁ, D. Aplikácia faktorovej analýzy pri klasifikácii kriminálnych činností. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 20–27. ISBN 978-80-227-4751-6.
- BOHDALOVÁ, M. – KALINA, M. – NÁNÁSIOVÁ, O. Modelovanie kauzality II. In KALINA, M. – MINÁROVÁ, M. – NÁNÁSIOVÁ, O. *PRASTAN 2017*. Bratislava: Jednota slovenských matematikov a fyzikov, 2017, s. 7. ISBN 978-80-89829-04-0.
- BORKOTOKEY, S. – MESIAR, R. – LI, J. Event-Based Transformations of Capacities. In *Modeling Decisions for Artificial Intelligence*. Cham (Switzerland): Springer, 2017, s. 33–39. ISBN 978-3-319-67421-6.
- BUSTINCE, H. – FERNANDEZ, J. – DE MIGUEL, L. – BARRENECHEA, E. – PAGOLA, M. – MESIAR, R. OWA operators and Choquet integrals in the interval-valued setting. In KACPRZYK, J. – BELIAKOV, G. *Granular, Soft and Fuzzy Approaches for Intelligent Systems*. Switzerland: Springer, 2017, s. 65–77. ISBN 978-3-319-40312-0.
- ČUNDERLÍK, R. – KOLLÁR, M. Meshless boundary collocation approach applied for the Earth's gravity field modelling from the GOCE satellite data. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 425. ISBN 978-80-227-4710-3.
- ČUNDERLÍK, R. – VIPIANA, F. Hierarchical matrices implemented into the boundary integral approaches for gravity field modelling. In *Geophysical Research Abstracts. Volume 19/2017*. Göttingen: Copernicus Publications, 2017.
- DE MIGUEL, L. – BUSTINCE, H. – FERNANDEZ, J. – ASIAIN, M J. – KOLESÁROVÁ, A. – MESIAR, R. About directionally monotone and pre-aggregation functions. In *FUZZ-IEEE 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-6034-4.
- DE MIGUEL, L. – BUSTINCE, H. – FERNANDEZ, J. – ASIAIN, M J. – KOLESÁROVÁ, A. – MESIAR, R. About Directionally Monotone and Pre-aggregation Functions. In *FUZZ-IEEE 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-6034-4.
- DIBALA, M. – NAVARA, M. Discrete copulas and maximal entropy principle. In *Copulas and Their Applications*. Almería: Universidad de Almería, 2017, s. 24. ISBN 978-84-697-4075-0.
- DIMURO, G P. – BUSTINCE, H. – FERNANDEZ, J. – MESIAR, R. – BEDREGAL, B R C. New Results on

- Pre-aggregation Functions: introducing (light) pre-t-norms. In *IFSA-SCIS 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-4917-2.
- FAIXOVÁ CHALACHANOVÁ, J. – MÉSZÁROSOVÁ, K. Fraktálna dimenzia a jej implementácia v GIS softvéroch. In VAJSÁBLOVÁ, M. – ŠIPEKY, L. *Geometria a jej aplikácie 2017: geometrické modelovanie prvkov krajiny. Zborník abstraktov. Zvolen, SR, 19. 1. 2017 [elektronický zdroj]*. Bratislava : SPEKTRUM STU, 2017, ISBN 978-80-227-4676-2.
- FILLO, L. – ČUHÁK, M. – MINÁROVÁ, M. Resistance of Concrete Slender Columns. In *Procedia Engineering*. 2017, s. 189–194.
- FROLKOVIČ, P. – KLEINOVÁ, V. Two methods for optical flow estimation. In MIKULA, K. – ŠEVČOVIČ, D. – URBÁN, J. *Proceedings of Equadiff 2017 Conference*. Bratislava: Spektrum STU, 2017, s. 331–340. ISBN 978-80-227-4757-8.
- FROLKOVIČ, P. Semi-implicit methods for advection dominated problems. In *Mathematical and Computational Issues in the Geosciences 2017*. Erlangen: Friedrich-Alexander University Erlangen-Nürnberg, 2017, s. 152.
- FROLKOVIČ, P. Semi-implicit methods for numerical solution of level set advection equation. In *ACOMEN 2017*. Ghent: Ghent University, 2017, s. 75–76. ISBN 978-94-6197-560-7.
- FROLKOVIČ, P. Semi-implicit numerical methods for advection equations with applications. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 66. ISBN 978-80-227-4710-3.
- HAHN, J. – MIKULA, K. – FROLKOVIČ, P. – BASARA, B. Semi-implicit level set method with inflow-based gradient in a polyhedron mesh. In CANCÈS, C. – OMNES, P. *Finite Volumes for Complex Applications VIII – Hyperbolic, Elliptic and Parabolic Problems*. Berlin: Springer, 2017, s. 81–89. ISBN 978-3-319-57393-9.
- HAHN, J. – MIKULA, K. – FROLKOVIČ, P. – BASARA, B. Semi-implicit method with inflow-based gradient for the G-equation model on a polyhedron mesh. In *ACOMEN 2017*. Ghent: Ghent University, 2017, s. 77–78. ISBN 978-94-6197-560-7.
- HAHN, J. – MIKULA, K. – FROLKOVIČ, P. – BASARA, B. Semi-implicit method with inflow-based gradient for the level set equations on a polyhedron mesh. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 62. ISBN 978-80-227-4710-3.
- HALVONIK, J. – KALICKÁ, J. – MAJTÁNOVÁ, L. – MINÁROVÁ, M. Spoľahlivosť modelov na predikciu odolnosti v preťačení dosiek bez šmykovej výstuže. In KALINA, M. – MINÁROVÁ, M. – NÁNÁSIOVÁ, O. *PRASTAN 2017*. Bratislava: Jednota slovenských matematikov a fyzikov, 2017, s. 8–9. ISBN 978-80-89829-04-0.
- HORANSKÁ, L. – SARKOCI, P. On generalized symmetry of copulas. In *Copulas and Their Applications*. Almería: Universidad de Almería, 2017, s. 25. ISBN 978-84-697-4075-0.
- HRIŇÁKOVÁ, K. – BESSY, S. – DROSS, F. – ŠKREKOVSKI, R. Maximal Wiener index for graphs with prescribed number of blocks. In *2nd Macedonian Workshop on Graph Theory and Its Applications*. Skopje: Saints Cyril and Methodius University of Skopje, 2017, s. 5.
- HUBOVÁ, O. – BUJDÁKOVÁ KONEČNÁ, L. – MACÁK, M. – CIGLAN, G. Pedestrian Wind Comfort around the Reinforced-Concrete Atypical Structure. In JENDŽELOVSKÝ, N. – BUJDÁKOVÁ KONEČNÁ, L. – GRMANOVÁ, A. *Static and Dynamic Analysis of Reinforced Concrete Structures*. Zurich: Trans Tech Publications, 2017, s. 153–163. ISBN 978-3-0357-1114-1.
- HUBOVÁ, O. – MACÁK, M. – BUJDÁKOVÁ KONEČNÁ, L. – CIGLAN, G. External Pressure Coefficients on the Atypical High-Rise Building – Computing Simulation and Measurements in Wind Tunnel. In *Procedia Engineering*. 2017, s. 488–495.
- KALINA, M. Nullnorms and t-operators on bounded lattices: a comparison. In *ISFS 2017. The 3rd International Symposium on Fuzzy Sets – Uncertainty Modelling*. Rzeszów: University of Rzeszów Faculty of Mathematics and Natural Sciences, 2017, s. 23–26. ISBN 978-83-7996-431-4.
- KLEINOVÁ, V. A numerical method for optical flow estimation. In *Proceedings of 2nd Workshop on Modelling of Biological Cells, Fluid Flow and Microfluidics*. Žilina: Faculty of Management Science and Informatics University of Žilina, 2017, s. 20. ISBN 978-1542769198.
- KLEINOVÁ, V. – FROLKOVIČ, P. A new numerical method for optical flow estimation based on level-set motion. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 350. ISBN 978-80-227-

## Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty

4710-3.

- KLEINOVÁ, V. – FROLKOVIČ, P. Methods for optical flow estimation. In *Workshop on scientific computing 2017*. Praha: Department of Mathematics FNSPE CTU in Prague, 2017, s. 2.
- KLEINOVÁ, V. – FROLKOVIČ, P. Numerical solution of advection equation for the motion in normal direction with application in optical flow estimation. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 28–34. ISBN 978-80-227-4751-6.
- KLEMENT, E P. – KOLESÁROVÁ, A. – MESIAR, R. – SAMINGER-PLATZ, S. Copula constructions using ultramodularity. In ÚBEDA-FLORES, M. – AMO ARTERO, E D. *Copulas and Dependence Models with Applications*. Cham (Switzerland): Springer, 2017, s. 135–156. ISBN 978-3-319-64220-8.
- KLEMENT, E P. – KOLESÁROVÁ, A. – MESIAR, R. – SAMINGER-PLATZ, S. Copula constructions using ultramodularity. In ÚBEDA-FLORES, M. – AMO ARTERO, E D. *Copulas and Dependence Models with Applications*. Cham (Switzerland): Springer, 2017, s. 135–156. ISBN 978-3-319-64220-8.
- KNOR, M. – BONAMY, M. – LUŽAR, B. – PINLOU, A. – ŠKREKOVSKI, R. On the difference Sz(G) – W(G) for non-complete graphs. In *Cycles and Colourings 2017*. Košice: Univerzita P. J. Šafárika v Košiciach, 2017, s. 18.
- KNOR, M. – BONAMY, M. – LUŽAR, B. – PINOLU, A. – ŠKREKOVSKI, R. Lower bound on the Szeged index using the Wiener index. In *2nd Macedonian Workshop on Graph Theory and Its Applications*. Skopje: Saints Cyril and Methodius University of Skopje, 2017, s. 4.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Some Bounds on Balaban Index. In GUTMAN, I. – FURTULA, B. *Bounds in Chemical Graph Theory – Basics*. Kragujevac: University of Kragujevac, 2017, s. 189–200. ISBN 978-86-6009-043-2.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Sum-Balaban index and its properties. In *Proceedings of the 1st Croatian Combinatorial Days*. Zagreb: University of Zagreb Faculty of Civil Engineering, 2017, s. 41–52. ISBN 978-953-8168-22-2.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Wiener Index of Digraphs. In GUTMAN, I. – FURTULA, B. *Bounds in Chemical Graph Theory – Advances*. Kragujevac: University of Kragujevac, 2017, s. 141–153. ISBN 978-6009-046-3.
- KOHNOVÁ, S. – PAPAIOANNOU, G J. – BACIGÁL, T. – SZOLGAY, J. – HLAVČOVÁ, K. – LOUKAS, A. – VÝLETA, R. On the suitability of the copula types for the joint modelling of flood peaks and volumes along the Danube River. In *Geophysical Research Abstracts. Volume 19/2017*. Göttingen: Copernicus Publications, 2017.
- KOLLÁR, J. Determining the text reading direction of an unknown text. In *EuroHCC 2017*. Bratislava: Spektrum STU, 2017, s. 1–2. ISBN 978-80-227-4687-8.
- KOLLÁR, M. – ČUNDERLÍK, R. – MIKULA, K. Nonlinear diffusion filtering methods locally adapted to data features. In *Geophysical Research Abstracts. Volume 19/2017*. Göttingen: Copernicus Publications, 2017.
- KOLLÁR, M. – MIKULA, K. – ČUNDERLÍK, R. New software for filtering geodetic data by the nonlinear diffusion. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 35–41. ISBN 978-80-227-4751-6.
- KOLLÁR, M. – MIKULA, K. – ČUNDERLÍK, R. Nonlinear diffusion filter influenced by the surface Laplacian of data. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 351. ISBN 978-80-227-4710-3.
- KOLLÁR, M. – MIKULA, K. – ČUNDERLÍK, R. Nonlinear diffusion filtering methods locally adapted to data features. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 431. ISBN 978-80-227-4710-3.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – BACIGÁL, T. Analysis of Dependencies between Growth Rates of GDP of V4 Countries Using 4-dimensional Vine Copulas. In *ASMDA 2017*. [s.l.]: International Society for the Advancement of Science and Technology, 2017, s. 573–582. ISBN 978-618-5180-23-2.
- KOPFOVÁ, J. – MINÁROVÁ, M. – SUMEC, J. Visco-elasto-plastic modeling. In MIKULA, K. – ŠEVČOVIČ, D. – URBÁN, J. *Proceedings of Equadiff 2017 Conference*. Bratislava: Spektrum STU, 2017, s. 173–180. ISBN

978-80-227-4757-8.

- KÓSA, B. – HALIČKOVÁ-BREHOVSKÁ, J. – MIKULA, K. New efficient numerical method for 3D point cloud surface reconstruction by using level set methods. In MIKULA, K. – ŠEVČOVIČ, D. – URBÁN, J. *Proceedings of Equadiff 2017 Conference*. Bratislava: Spektrum STU, 2017, s. 387–396. ISBN 978-80-227-4757-8.
- KÓSA, B. – HALIČKOVÁ-BREHOVSKÁ, J. – MIKULA, K. 3D point cloud surface reconstruction by using level set methods. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 352. ISBN 978-80-227-4710-3.
- KÓSA, B. – MIKULA, K. Fast numerical method for 3D point cloud surface reconstruction. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 42–46. ISBN 978-80-227-4751-6.
- KOUCHAKINEJAD, F. – MASHINCHI, M. – MESIAR, R. L-Fuzzy Bags. In TORRA, V. – DAHLBOM, A. – NARUKAWA, Y. *Fuzzy Sets, Rough Sets, Multisets and Clustering*. Cham, Switzerland: Springer International Publishing AG, 2017, s. 195–219. ISBN 978-3-319-47558-5.
- KRIVÁ, Z. – HANDLOVIČOVÁ, A. Evaluation of Gradient Norms on a Consistent Quadtree Grid in 2D. In KULCZYCKI, P. – KÓCZY, L T. – MESIAR, R. – KACPRZYK, J. *Information Technology and Computational Physics*. Cham (Switzerland): Springer International Publishing, 2017, s. 143–164. ISBN 978-3-319-44259-4.
- KRIVÁ, Z. Removing the speckle noise by anisotropic diffusion. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 433. ISBN 978-80-227-4710-3.
- KULCZYCKI, P. – KÓCZY, L T. – MESIAR, R. – KACPRZYK, J. Preface. In KULCZYCKI, P. – KÓCZY, L T. – MESIAR, R. – KACPRZYK, J. *Information Technology and Computational Physics*. Cham (Switzerland): Springer International Publishing, 2017, s. 1–2. ISBN 978-3-319-44259-4.
- MACÁK, M. Domain decomposition methods in FVM approach to gravity field modelling. In *Geophysical Research Abstracts. Volume 19/2017*. Göttingen: Copernicus Publications, 2017.
- MACÁK, M. – HUBOVÁ, O. – KONEČNÁ, L. Modeling of Turbulent Wind Flow around High-rise Building Verified by Results from Test in Wind Tunnel Laboratory. In SZARKOVÁ, D. – LETAVAJ, P. – RICHTÁRIKOVÁ, D. – PRÁŠILOVÁ, M. *Aplimat 2017*. Bratislava: Spektrum STU, 2017, s. 941–951. ISBN 978-80-227-4650-2.
- MACÁK, M. The computing simulations of the measurements in wind tunnel. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 436. ISBN 978-80-227-4710-3.
- MEDĽA, M. – MIKULA, K. – ČUNDERLÍK, R. – MACÁK, M. Numerical solution to the oblique derivative boundary value problem on non-uniform grids above the Earth topography. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 437. ISBN 978-80-227-4710-3.
- MEDĽA, M. – MIKULA, K. Gaussian curvature based tangential redistribution of points on evolving surfaces. In MIKULA, K. – ŠEVČOVIČ, D. – URBÁN, J. *Proceedings of Equadiff 2017 Conference*. Bratislava: Spektrum STU, 2017, s. 255–264. ISBN 978-80-227-4757-8.
- MEDĽA, M. – MIKULA, K. Tangenciálna redistribúcia bodov plochy závislá na krivosti. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 47–53. ISBN 978-80-227-4751-6.
- MEDĽA, M. – MIKULA, K. The construction of 2D and 3D meshes using the surface evolution. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 61. ISBN 978-80-227-4710-3.
- MESIAR, R. Aggregation functions: Recent results and trends. In *FUZZ-IEEE 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-6034-4.
- MESIAR, R. Aggregation theory – some new results. In *ISFS 2017. The 3rd International Symposium on Fuzzy Sets – Uncertainty Modelling*. Rzeszów: University of Rzeszów Faculty of Mathematics and Natural Sciences, 2017, s. 35–39. ISBN 978-83-7996-431-4.
- MESIAR, R. – KOLESÁROVÁ, A. On Some Recent Construction Methods for Bivariate Copulas. In KULCZYCKI, P. – KÓCZY, L T. – MESIAR, R. – KACPRZYK, J. *Information Technology and Computational Physics*. Cham (Switzerland): Springer International Publishing, 2017, s. 243–253. ISBN 978-3-319-44259-4.
- MESIAR, R. – KOLESÁROVÁ, A. On some recent copula constructions. In *Copulas and Their Applications*.

## Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty

- Almería: Universidad de Almería, 2017, s. 21. ISBN 978-84-697-4075-0.
- MESIAR, R. – STUPŇANOVÁ, A. Symmetrization Methods for Aggregation Functions. In *Modeling Decisions for Artificial Intelligence*. Cham (Switzerland): Springer, 2017, s. 26–32. ISBN 978-3-319-67421-6.
- MIKULA, K. – ČUNDERLÍK, R. – MACÁK, M. – MINARECHOVÁ, Z. – ŠPIR, R. High-performance computing at the Department of mathematics and descriptive geometry of the FCE SUT in Bratislava. In *HPC Focus, volume 2017*. Bratislava: Výpočtové stredisko SAV, 2017, s. 21–27. ISBN 978-80-89871-06-3.
- MINÁROVÁ, M. – SUMEC, J. Alternative calculation of the retardation and relaxation spectra for the viscoelastic response of the solid phase materials. In *Procedia Engineering*. 2017, s. 597–602.
- MINÁROVÁ, M. – SUMEC, J. Constitutive equations for selected rheological models in linear viscoelasticity. In AL ALI, M. – PLATKO, P. *Advances and Trends in Engineering Sciences and Technologies II*. London: Taylor & Francis Group, 2017, s. 207–212. ISBN 978-1-138-03224-8.
- MINÁROVÁ, M. – SUMEC, J. Mechanical response of viscoelastic materials; governing equations and specific solutions. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 439. ISBN 978-80-227-4710-3.
- MINÁROVÁ, M. – SUMEC, J. Rheological models in biomechanics and civil engineering. In KALINA, M. – MI- NÁROVÁ, M. – NÁNÁSIOVÁ, O. *PRASTAN 2017*. Bratislava: Jednota slovenských matematikov a fyzikov, 2017, s. 17. ISBN 978-80-89829-04-0.
- MOJZEŠ, M. – WOZNIAK, M. – HÁBEL, B. – MACÁK, M. Monitoring of the Earth's surface deformation in the area of water dam Zarnowiec. In *Geophysical Research Abstracts. Volume 19/2017*. Göttingen: Copernicus Publications, 2017.
- NÁNÁSIOVÁ, O. – ČERŇANOVÁ, V. – VALÁŠKOVÁ, L. Modelovanie logických spojok. In KALINA, M. – MINÁ- ROVÁ, M. – NÁNÁSIOVÁ, O. *PRASTAN 2017*. Bratislava: Jednota slovenských matematikov a fyzikov, 2017, s. 18. ISBN 978-80-89829-04-0.
- OBERLANDER, J. – RAY, N. – SCHULZ, R. – FROLKOVIČ, P. Numerical computation of effective parameters in an evolving porous medium. In *Mathematical and Computational Issues in the Geosciences 2017*. Erlangen: Friedrich-Alexander University Erlangen-Nürnberg, 2017, s. 169.
- PATERNAIN, D. – JURIO, A. – BUSTINCE, H. – CAMPIÓN, M. J. – PERFILJEVA, I. – MESIAR, R. A Construction Method of Internal Functions. In *FUZZ-IEEE 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-6034-4.
- SANZ, J A. – GALAR, M. – MESIAR, R. – KOLESÁROVÁ, A. – BUSTINCE, H. – FERNANDEZ, J. – MONTERO, J. Construction of Capacities from Overlap Indexes. In TORRA, V. – DAHLBOM, A. – NARUKAWA, Y. *Fuzzy Sets, Rough Sets, Multisets and Clustering*. Cham, Switzerland: Springer International Publishing AG, 2017, s. 323–335. ISBN 978-3-319-47558-5.
- SESSMA-SARA, M. – DE MIGUEL, L. – LAFUENTE, J. – MESIAR, R. – KOLESÁROVÁ, A. – BUSTINCE, H. Strengthened ordered directionally monotone functions. In *ISCAMI 2017*. Ostrava: University of Ostrava, 2017, s. 45–46. ISBN 978-80-7464-921-9.
- SESSMA-SARA, M. – MARCO-DETCHART, C. – BUSTINCE, H. – BARRENECHEA, E. – LAFUENTE, J. – KOLESÁROVÁ, A. – MESIAR, R. Some properties and construction methods for ordered directionally monotone functions. In *FUZZ-IEEE 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-6034-4.
- SESSMA-SARA, M. – MARCO-DETCHART, C. – BUSTINCE, H. – BARRENECHEA, E. – LAFUENTE, J. – KOLESÁROVÁ, A. – MESIAR, R. Some Properties and Construction Methods for Ordered Directionally Monotone Functions. In *FUZZ-IEEE 2017*. [s.l.]: IEEE, 2017, ISBN 978-1-5090-6034-4.
- STAŠOVÁ, O. – HANDLOVIČOVÁ, A. – MIKULA, K. – PEYRIÉRAS, N. Nonlinear Tensor Diffusion and its Applications in Image Processing. In KALINA, M. – MINÁROVÁ, M. – NÁNÁSIOVÁ, O. *PRASTAN 2017*. Bratislava: Jednota slovenských matematikov a fyzikov, 2017, s. 23. ISBN 978-80-89829-04-0.
- STAŠOVÁ, O. – MIKULA, K. – HANDLOVIČOVÁ, A. – PEYRIÉRAS, N. Nonlinear tensor diffusion in image processing. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 395. ISBN 978-80-227-4710-3.
- STAŠOVÁ, O. – MIKULA, K. – HANDLOVIČOVÁ, A. – PEYRIÉRAS, N. Nonlinear tensor diffusion in image processing. In MIKULA, K. – ŠEVČOVIČ, D. – URBÁN, J. *Proceedings of Equadiff 2017 Conference*.

- Bratislava: Spektrum STU, 2017, s. 377–386. ISBN 978-80-227-4757-8.
- STUPŇANOVÁ, A. On the equality of universal integrals. In *ISFS 2017. The 3rd International Symposium on Fuzzy Sets – Uncertainty Modelling*. Rzeszów: University of Rzeszów Faculty of Mathematics and Natural Sciences, 2017, s. 45–47. ISBN 978-83-7996-431-4.
- ŠAGÁT, M. – REMEŠÍKOVÁ, M. Discrete Lagrangian algorithm for finding geodesics and its comparisons with the fast marching method. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 54–61. ISBN 978-80-227-4751-6.
- ŠAGÁT, M. – REMEŠÍKOVÁ, M. Finding geodesics on triangulated meshes. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 445. ISBN 978-80-227-4710-3.
- ŠELIGA, A. A note on the computational complexity of Lehrer integral. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 62–65. ISBN 978-80-227-4751-6.
- ŠIPOŠOVÁ, A. – KOUCHAKINEJAD, F. – VALIPOUR, E. Absolute continuity of aggregation functions. In *48th Annual Iranian Mathematics Conference*. Hamadan: Bu-Ali Sina University, 2017.
- ŠIRÁŇ, J. Regular and bi-rotary maps of negative prime Euler characteristic. In *26th British Combinatorial Conference*. Glasgow: University of Strathclyde, 2017, s. 92.
- ŠPIR, R. – MIKULA, K. Cell trajectory extraction and validation from 4D biomedical data using PDE's. In *Workshop on scientific computing 2017*. Praha: Department of Mathematics FNSPE CTU in Prague, 2017, s. 4.
- ŠPIR, R. – MIKULA, K. Cell trajectory extraction from 4D biomedical data using PDE's and validation of the results. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 447. ISBN 978-80-227-4710-3.
- ŠPIR, R. – MIKULA, K. – PEYRIERAS, N. Cell lineage tree reconstruction from time series of 3D images of zebrafish embryogenesis. In *Computer Vision – ACCV 2016 Workshops*. Cham (Switzerland): Springer, 2017, s. 539–554. ISBN 978-3-319-54426-7.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. Application of the mean curvature flow in the image segmentation. In *Differential Equations and Applications*. Brno: Institute of Mathematics Faculty of Mechanical Engineering Brno University of Technology, 2017, s. 77.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. Convergence of the numerical scheme for regularised Riemannian mean curvature flow equation. In *ISCAMI 2017*. Ostrava: University of Ostrava, 2017, s. 54–55. ISBN 978-80-7464-921-9.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. – MIKULA, K. – HORNÁČEK, T. Finite volume method in the image segmentation and missing boundaries completion. In KALINA, M. – MINÁROVÁ, M. – NÁNÁSIOVÁ, O. *PRASTAN 2017*. Bratislava: Jednota slovenských matematikov a fyzikov, 2017, s. 24. ISBN 978-80-89829-04-0.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. Numerical Scheme for Regularised Riemannian Mean Curvature Flow Equation. In CANCÈS, C. – OMNES, P. *Finite Volumes for Complex Applications VIII – Methods and Theoretical Aspects*. Berlin: Springer, 2017, s. 411–419. ISBN 978-3-319-57396-0.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. Regularised Riemannian mean curvature flow equation. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 399. ISBN 978-80-227-4710-3.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. Two approaches for the approximation of the nonlinear smoothing term in the image segmentation. In MIKULA, K. – ŠEVČOVIČ, D. – URBÁN, J. *Proceedings of Equadiff 2017 Conference*. Bratislava: Spektrum STU, 2017, s. 229–236. ISBN 978-80-227-4757-8.
- TIBENSKÝ, M. Neštruktúrované dátá: základné princípy získavania informácií z textov a obrázkov. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 66–71. ISBN 978-80-227-4751-6.
- TJEŠŠOVÁ, M. Simulácia medzistavcovej platničky s použitím konečného prvku fluid pre uzavreté objemové oblasti na opisanie nestlačiteľného jadra. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2017, s. 72–77. ISBN 978-80-227-4751-6.
- TJEŠŠOVÁ, M. – SOKOL, M. Finite element modelling of the human spine. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 449. ISBN 978-80-227-4710-3.

## **Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty**

- TOMEK, L. – MIKULA, K. Finite volume methods for mean curvature flow. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 65. ISBN 978-80-227-4710-3.
- TOMEK, L. – MIKULA, K. – REMEŠÍKOVÁ, M. Computing minimal surfaces by mean curvature flow with area-oriented tangential redistribution. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 450. ISBN 978-80-227-4710-3.
- URBÁN, J. – MIKULA, K. Atlas based image segmentation. In *ACOMEN 2017*. Ghent: Ghent University, 2017, s. 79. ISBN 978-94-6197-560-7.
- URBÁN, J. – MIKULA, K. Atlas based segmentation. In MEDĽA, M. – STRUK, P. *Equadiff 2017*. Bratislava: Spektrum STU, 2017, s. 451. ISBN 978-80-227-4710-3.
- VAJSÁBLOVÁ, M. Deskriptívna geometria otvorená pre aplikácie v stavebnej a geodetickej praxi. In ĎURICA, M. *Deskriptívna geometria dnes a zajtra*. Žilina: EDIS, 2017, s. 59–68. ISBN 978-80-554-1409-6.
- VAJSÁBLOVÁ, M. Geometric tools in a precision of image elements on maps. In VELICOVÁ, D. – LÁVIČKA, M. – TOMICZKOVÁ, S. *Slovak-Czech Conference on Geometry and Graphics 2017*. Bratislava: Vydavatelstvo SCHK, 2017, s. 25–36. ISBN 978-80-89597-78-9.
- ŽDÍMALOVÁ, M. Mathematics and its Applications in the Architecture and Urban Design of Selected Parts of Mexico. In SZARKOVÁ, D. – LETAVAJ, P. – RICHTÁRIKOVÁ, D. – PRÁŠILOVÁ, M. *Aplimat 2017*. Bratislava: Spektrum STU, 2017, s. 1728–1752. ISBN 978-80-227-4650-2.
- ŽDÍMALOVÁ, M. – ROŽNOVJAK, R. – BOHUMEL, T. – EL FALOUGY, H. – WEISSMAN, P. – KUBÍKOVÁ, E. – KOPÁNYI, M. Graph algorithms in image processing. In KALINA, M. – MINÁROVÁ, M. – NÁNÁSIOVÁ, O. *PRASTAN 2017*. Bratislava: Jednota slovenských matematikov a fyzikov, 2017, s. 25. ISBN 978-80-89829-04-0.
- ŽDÍMALOVÁ, M. – VAVRÍKOVÁ, L. Mathematics, Garden and Landscape Architecture. In SZARKOVÁ, D. – LETAVAJ, P. – RICHTÁRIKOVÁ, D. – PRÁŠILOVÁ, M. *Aplimat 2017*. Bratislava: Spektrum STU, 2017, s. 1753–1778. ISBN 978-80-227-4650-2.

## Záverečná práca

- BERANOVÁ, N. – MIKULA, K. *Numerické metódy na rekonštrukciu 3D scény z fotografií dvoch kamier.* Diplomová práca. 2017.
- BRÁDŇANSKÁ, N. – KRIVÁ, Z. *Spracovanie polarimetrických dát.* Diplomová práca. 2017.
- CRUZ, S. – MACÁK, M. *Fluent a jeho možnosti pre modelovanie vplyvu vetra.* Diplomová práca. 2017.
- CSEPREGI, N. – FROLKOVIČ, P. *Numerické riešenie rovníc plynnej vody.* Bakalárska práca. 2017.
- FRATRIČ, P. – ŠIRÁŇ, J. *Generovanie eliptických kriviek s predpísanými vlastnosťami nad konečnými poľami.* Bakalárska práca. 2017.
- GAÁLOVÁ, Z. – REMEŠÍKOVÁ, M. *Mathematical modeling of plant root growth and interaction.* Diplomová práca. 2017.
- GOREKOVÁ, I. – BACIGÁL, T. *Modele pravdepodobnosti a strojové učenie.* Bakalárska práca. 2017.
- GRAMBLIČKOVÁ, B. – HANDLOVIČOVÁ, A. *Numerické riešenie problému prúdenia podzemnej vody.* Bakalárska práca. 2017.
- HAJDIN, M. – FROLKOVIČ, P. *Využitie numerickej schémy transportu po diagonále pre niektoré aplikácie.* Bakalárska práca. 2017.
- HAJDINOVÁ, K. – KRIVÁ, Z. *Filtrácia SAR (radarových) snímok s využitím štatistiky.* Diplomová práca. 2017.
- HORNÁČEK, T. – MIKULA, K. *Numerické metódy na segmentáciu 4D obrazu.* Diplomová práca. 2017.
- LAZÍKOVÁ, K. – KOMORNÍKOVÁ, M. *Viacrežimové modely s prepínaním v tvare agregačnej funkcie a ich aplikácie.* Diplomová práca. 2017.
- MAJOR, J. – ŽDÍMALOVÁ, M. *Grafové algoritmy a ich použitie pri spracovaní biomedicínskych dát.* Diplomová práca. 2017.
- MAZÚCH, J. – FROLKOVIČ, P. *Priama a inverzná úloha šírenia znečistenia v rieke a jej numerické riešenie.* Diplomová práca. 2017.
- OBOŇOVÁ, Ž. – ŠIPOŠOVÁ, A. *Aplikácia multikriteriálnej teórie hier vo viacozmerných dopravných úlohách.* Diplomová práca. 2017.
- OBRTÁČOVÁ, T. – MACÁK, M. *Statická a dynamická analýza mosta.* Bakalárska práca. 2017.
- ŠELIGA, A. – SARKOCI, P. *Quasiconformal maps of Parametric Surfaces.* Diplomová práca. 2017.
- TAKÁČ, Z. *Fuzzy množiny typu 2.* Habilitačná práca. 2017.
- TOMEK, L. – MIKULA, K. *Finite volume methods for mean curvature flow of surfaces.* Dizertačná práca. 2017.
- UHRÍK, M. *Kladné riešenia niektorých typov funkcionálnych diferenciálnych rovníc prvého rádu.* Habilitačná práca. 2017.
- UHRÍK, M. *Reprezentácia a redukcia informácií v rámci teórie konceptových zväzov.* Habilitačná práca. 2017.
- ŽÁKOVÁ, D. – BACIGÁL, T. *Modele časových radov s chýbajúcimi alebo nepravidelnými pozorovaniami.* Bakalárska práca. 2017.

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