

Slovenská technická univerzita v Bratislave

## Publikačná činnosť

Členenie podľa druhu

Názov pracoviska: Katedra matematiky a deskriptívnej geometrie (SvF)



## **Obsah**

<b>Články v časopisoch</b>	<b>4</b>
<b>Monografie, učebnice, skriptá, príručky, normy, patenty, výskumné správy, iné neperiodické publikácie</b>	<b>7</b>
<b>Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty</b>	<b>8</b>
<b>Záverečná práca</b>	<b>16</b>
<b>Zborník</b>	<b>18</b>
<b>Autorský index</b>	<b>19</b>

## Články v časopisoch

- AGAHI, H. – BABAKHANI, A. – MESIAR, R. Pseudo-fractional integral inequality of Chebyshev type. *Information Sciences*, 301. s. 161–168.
- AGAHI, H. – MESIAR, R. On Cauchy-Schwarz's inequality for Choquet like integrals without the comonotonicity condition. *Soft Computing* :, 19. s. 1627–1634.
- AGAHI, H. – MOHAMMADPOUR, A. – MESIAR, R. Generalizations of some probability inequalities and L-p convergence of random variables for any monotone measure. *Brazilian Journal of Probability and Statistics*, 29. s. 878–896.
- BABAKHANI, A. – AGAHI, H. – MESIAR, R. A (star, \*)-based Minkowski's inequality for Sugeno fractional integral of order  $\alpha > 0$ . *Fractional Calculus and Applied Analysis*, 18. s. 862–874.
- BACIGÁL, T. – MESIAR, R. – NAJJARI, V. Generators of copulas and aggregation. *Information Sciences*, 306. s. 81–87.
- BACIGÁL, T. – NAJJARI, V. – MESIAR, R. – BAL, H. Additive generators of copulas. *Fuzzy Sets and Systems*, 264. s. 42–50.
- BACHRATÝ, M. – ŠIRÁŇ, J. Polarity graphs revisited. *Ars Mathematica Contemporanea*, 8. s. 55–67.
- BĚHOUNEK, L. – BODENHOFER, U. – CINTULA, P. – SAMINGER-PLATZ, S. – SARKOCI, P. Graded Dominance and Related Graded Properties of Fuzzy Connectives. *Fuzzy Sets and Systems*, 262. s. 78–101.
- BORKOTOKEY, S. – HAZARIKA, P. – MESIAR, R. A multilinear extension of a class of fuzzy bi-cooperative games. *Journal of Intelligent and Fuzzy Systems*, 28. s. 681–691.
- BORKOTOKEY, S. – HAZARIKA, P. – MESIAR, R. Fuzzy Bi-cooperative games in multilinear extension form. *Fuzzy Sets and Systems*, 259. s. 44–55.
- BREŽNÝ, M. – FUSKOVÁ, B. – HOLÝ, D. – KALICKÁ, J. – PAUČO, T. – WIMMER, G. Gradientná metóda a optimálne nastavenie parametrov pri tavení skla. *Sklář a keramik*, 65. s. 3–5.
- BUSTINCE, H. – FERNANDEZ, J. – KOLESÁROVÁ, A. – MESIAR, R. Directional monotonicity of fusion functions. *European Journal of Operational Research*, 244. s. 300–308.
- BUSTINCE, H. – FERNANDEZ, J. – MESIAR, R. Special issue on aggregation functions at AGOP 2013 and EUSFLAT 2013. *Fuzzy Sets and Systems*, 264. s. 1–2.
- CENA, A. – GAGOLEWSKI, M. – MESIAR, R. Problems and challenges of information resources producers' clustering. *Journal of Informetrics [elektronický zdroj]* :, 9. s. 273–284.
- DE BAETS, B. – DE MEYER, H. – KALICKÁ, J. – MESIAR, R. On the relationship between modular functions and copulas. *Fuzzy Sets and Systems*, 268. s. 110–126.
- DE MIGUEL, L. – BUSTINCE, H. – FERNANDEZ, J. – KOLESÁROVÁ, A. – MESIAR, R. – DE BAETS, B. Construction of admissible orders for intervals. *Mathware & Soft Computing magazine*, 22. s. 28–29.
- DUTTA, B. – GUHA, D. – MESIAR, R. A Model Based on Linguistic 2-Tuples for Dealing With Heterogeneous Relationship Among Attributes in Multi-expert Decision Making. *IEEE Transactions on fuzzy systems*, 23. s. 1817–1831.
- ERTUGRUL, Ü. – KARACAL, F. – MESIAR, R. Modified Ordinal Sums of Triangular Norms and Triangular Conorms on Bounded Lattices. *International Journal of Intelligent Systems*, 30. s. 807–817.
- EYMARD, R. – HANDLOVIČOVÁ, A. – HERBIN, R. – MIKULA, K. – STAŠOVÁ, O. Applications of approximate gradient schemes for nonlinear parabolic equations. *Applications of Mathematics*, 60. s. 135–156.
- FROLKOVIČ, P. – MIKULA, K. – URBÁN, J. Distance function and extension in normal direction for implicitly defined interfaces. *Discrete and Continuous Dynamical Systems – Series S*, 8. s. 871–880.
- FROLKOVIČ, P. – MIKULA, K. – URBÁN, J. Semi-implicit finite volume level set method for advective motion of interfaces in normal direction. *Applied Numerical Mathematics*, 95. s. 214–228.
- GARCIA-JIMENEZ, S. – BUSTINCE, H. – HÜLLERMEIER, E. – MESIAR, R. – PAL, N R. – PRADERA, A. Overlap Indices: Construction of and Application to Interpolative Fuzzy Systems. *IEEE Transactions on*

- fuzzy systems*, 23. s. 1259–1273.
- GRECO, S. – MESIAR, R. – RINDONE, F. Bipolar semicopulas. *Fuzzy Sets and Systems*, 268. s. 141–148.
- GRIGGS, T. – PSOMAS, C. – ŠIRÁŇ, J. Biembedding Steiner Triple Systems in Surfaces Using the Bose Construction. *Journal of Combinatorial Designs*, 23. s. 91–100.
- HERMANN, P. – MRKVIČKA, T. – MATTFELDT, T. – MINÁROVÁ, M. – HELISOVÁ, K. – NICOLIS, O. – WARTNER, F. – STEHLÍK, M. Fractal and stochastic geometry inference for breast cancer: a case study with random fractal models and Quermass-interaction process. *Statistics in Medicine*, 34. s. 2636–2661.
- JENČA, G. Effect Algebras are the Eilenberg-Moore Category for the Kalmbach Monad. *ORDER* :, 32. s. 439–448.
- JIN, L. – KALINA, M. – QIAN, G. Fuzzy orness measure and new orness axioms. *Kybernetika*, 51. s. 712–723.
- JURIGOVÁ, M. – MINÁROVÁ, M. – CHMÚRNY, I. Thermal performance of energy storage vessel. *Roczniki inżynierii budowlanej*, s. 11–16.
- JWAID, T. – DE MEYER, H. – MESIAR, R. – DE BAETS, B. The role of generalized convexity in conic copula constructions. *Journal of Mathematical analysis and applications*, 425. s. 864–885.
- KALINA, M. – ŽDÍMALOVÁ, M. Workshop z modelovania neurčitosti. *Informácie SvF STU* :, 15. s. 4.
- KARACAL, F. – MESIAR, R. Uninorms on bounded lattices. *Fuzzy Sets and Systems*, 261. s. 33–43.
- KESICIOGLU, M.N. – KARACAL, F. – MESIAR, R. Order-equivalent triangular norms. *Fuzzy Sets and Systems*, 268. s. 59–71.
- KLEMENT, E.P. – LI, J. – MESIAR, R. – PAP, E. Integrals based on monotone set functions. *Fuzzy Sets and Systems*, 281. s. 88–102.
- KLEMENT, E.P. – MESIAR, R. On the Expected Value of Fuzzy Events. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, 23. s. 57–74.
- KLEMENT, E.P. – MESIAR, R. – PAP, E. Non-classical measures and integrals. *Fuzzy Sets and Systems*, 259. s. 1–2.
- KNOR, M. – LUŽAR, B. – ŠKREKOVSKI, R. Sandwiching the (generalized) Randić index. *Discrete Applied Mathematics*, 181. s. 160–166.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. An inequality between the edge-Wiener index and the Wiener index of a graph. *Applied Mathematics and Computation*, 269. s. 714–721.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Balaban Index of Cubic Graphs. *MATCH* :, 73. s. 519–528.
- KOLESÁROVÁ, A. – MAYOR, G. – MESIAR, R. Quadratic constructions of copulas. *Information Sciences*, 310. s. 69–76.
- KOLESÁROVÁ, A. – MESIAR, R. – MONTERO, J. Sequential aggregation of bags. *Information Sciences*, 294. s. 305–314.
- KOLESÁROVÁ, A. – MESIAR, R. On linear and quadratic constructions of aggregation functions. *Fuzzy Sets and Systems*, 268. s. 1–14.
- KOLESÁROVÁ, A. – MESIAR, R. 1-Lipschitz power stable aggregation functions. *Information Sciences*, 294. s. 57–63.
- KRIVÁ, Z. – PAPČO, J. – VANKO, J. Quad-tree Based Finite Volume Method for Diffusion Equations with Application to SAR Imaged Filtering. *Acta Universitatis Palackianae Olomucensis, Facultas Rerum Naturalium, Mathematica*, 54. s. 41–61.
- KÚTIK, P. – MIKULA, K. Diamond-cell finite volume scheme for the Heston model. *Discrete and Continuous Dynamical Systems – Series S*, 8. s. 913–931.
- LI, J. – MESIAR, R. – PAP, E. – KLEMENT, E.P. Convergence theorems for monotone measures. *Fuzzy Sets and Systems*, 281. s. 103–127.
- MACÁK, M. – ČUNDERLÍK, R. – MIKULA, K. – MINARECHOVÁ, Z. An upwind-based scheme for solving the oblique derivative boundary-value problem related to physical geodesy. *Journal of geodetic science*, 5.

## Články v časopisoch

- s. 180–188.
- MESIAR, R. – KOMORNÍKOVÁ, M. – KOMORNÍK, J. Perturbation of bivariate copulas. *Fuzzy Sets and Systems*, 268. s. 127–140.
- MESIAR, R. – LI, J. – PAP, E. Superdecomposition integrals. *Fuzzy Sets and Systems*, 259. s. 3–11.
- MESIAR, R. – SMREK, P. Choquet-like integrals with respect to level-dependent capacities and phi-ordinal sums of aggregation function. *Kybernetika*, 51. s. 420–432.
- MESIAR, R. – STUPŇANOVÁ, A. Open problems from the 12th International Conference on Fuzzy Set Theory and Its Applications. *Fuzzy Sets and Systems*, 261. s. 112–123.
- MESIAR, R. – STUPŇANOVÁ, A. – YAGER, R R. Generalizations of OWA Operators. *IEEE Transactions on fuzzy systems*, 23. s. 2154–2162.
- MÉSZÁROSOVÁ, K. – MINARECHOVÁ, Z. Possibilities of using demographic data in spatial planning. *Terra Spectra STU. Planning Studies* ;, 7. s. 23–25.
- MIKULA, K. – PEYRIÉRAS, N. – ŠPIR, R. Numerical algorithm for tracking cell dynamics in 4D biomedical images. *Discrete and Continuous Dynamical Systems – Series S*, 8. s. 953–967.
- MIKULA, K. – REMEŠÍKOVÁ, M. – NOVYSEDLÁK, P. Truss structure design using a length-oriented surface remeshing technique. *Discrete and Continuous Dynamical Systems – Series S*, 8. s. 933–951.
- MIKULA, K. – ŠPIR, R. – SMÍŠEK, M. – FAURE, E. – PEYRIÉRAS, N. Nonlinear PDE based numerical methods for cell tracking in zebrafish embryogenesis. *Applied Numerical Mathematics*, 95. s. 250–266.
- MINARECHOVÁ, Z. – MACÁK, M. – ČUNDERLÍK, R. – MIKULA, K. High-resolution global gravity field modeling by the finite volume method. *Studia geophysica et geodaetica*, 59. s. 1–20.
- MINÁROVÁ, M. Radiácia vo vákuovej izolačnej vrstve. *Projekt – stavba*, 10. s. 17–19.
- NÁNÁSIOVÁ, O. – KALINA, M. Calculus for Non-Compatible Observables, Construction Through Conditional States. *International Journal of Theoretical Physics*, 54. s. 506–518.
- OUYANG, Y. – LIU, J. – MESIAR, R. Relationship between the concave integrals and the pan-integrals on finite spaces. *Journal of Mathematical analysis and applications*, 424. s. 975–987.
- PATERNAIN, D. – FERNANDEZ, J. – BUSTINCE, H. – MESIAR, R. – BELIAKOV, G. Construction of image reduction operators using averaging aggregation functions. *Fuzzy Sets and Systems*, 261. s. 87–111.
- PYKACZ, J. – VALÁŠKOVÁ, Ľ. – NÁNÁSIOVÁ, O. Bell-Type Inequalities for Bivariate Maps on Orthomodular Lattices. *Foundations of Physics*, 45. s. 900–913.
- STUPŇANOVÁ, A. A probabilistic approach to the arithmetics of fuzzy numbers. *Fuzzy Sets and Systems*, 264. s. 64–75.
- SZATMÁRI, D. Optimization of Conformal Cartographic Projections For the Slovak Republic According to Chebyshev's Theorem. *Slovak Journal of Civil Engineering*, 23. s. 19–24.
- ŠIAGIOVÁ, J. Approaching the mixed Moore bound for diameter two by Cayley graphs. *Australasian journal of combinatorics*, 61. s. 73–81.
- YAGER, R R. – MESIAR, R. On the Transformation of Fuzzy Measures to the Power Set and Its Role in Determining the Measure of a Measure. *IEEE Transactions on fuzzy systems*, 23. s. 842–849.
- ŽDÍMALOVÁ, M. – KOCIANOVÁ, V. Matematika, Umenie, Architektúra, Dizajn a Ekodizajn. *Informácie SvF STU* ;, 15. s. 8.

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

HAVRANOVÁ, Z. *Pracovné listy I – Deskriptívna geometria I*. Bratislava : Slovenská technická univerzita v Bratislave, 2015. 107 s. ISBN 978-80-227-4496-6.

HRIŇÁK, M. – HRIŇÁKOVÁ, K. *Zbierka aplikovaných úloh z matematiky*. Bratislava : Jednota slovenských matematikov a fyzikov, 2015. 112 s. ISBN 978-80-89829-01-9.

KALINA, M. – MINARECHOVÁ, Z. *Applied Mathematics for Civil Engineers*. Bratislava : Slovenská technická univerzita v Bratislave, 2015. 278 s. ISBN 978-80-227-4448-5.

KRIVÁ, Z. *Informatics II*. Bratislava : Slovenská technická univerzita v Bratislave, 2015. 96 s. ISBN 978-80-227-4333-4.

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

- AMBROZ, M. – BALAŽOVJECH, M. – MIKULA, K. Matematický model šírenia lesných požiarov. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 15. ISBN 978-80-554-1135-4.
- AMBROZ, M. – BALAŽOVJECH, M. – MIKULA, K. Mathematical model of forest fires propagation. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 13–19. ISBN 978-80-227-4514-7.
- ARAUJO-PARDO, G. – BALBUENA, C. – MILLER, M. – ŽDÍMALOVÁ, M. Gráficas mixtas de Moore. In *XXX Coloquio Víctor Neumann-Lara de Teoría de las Gráficas, Combinatoria y sus Aplicaciones: Oaxaca, Oaxaca (Mexico), 2. – 6. 3. 2015 elektronický zdroj*. Ciudad de México : Instituto de Matemáticas, Universidad Nacional Autónoma de México (UNAM), 2015, s. 173–176.
- BACIGÁL, T. Convergence of Linear Approximation of Archimedean generator from Williamson's Transform in Examples. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland*. Kraków: Wydawnictwa AGH, 2015, s. 47–52. ISBN 978-83-7464-838-7.
- BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. Preface. In BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. *AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 7. 2015*. Katowice : University of Silesia, 2015, s. 7. ISBN 978-83-8012-519-3.
- BACZYŃSKI, M. – GRZEGORZEWSKI, P. – MESIAR, R. Fuzzy implications based on semicopulas. In ALONSO, J M. – BUSTINCE, H. – REFORMAT, M. *Proceedings of the 2015 Conference of the International Fuzzy Systems Association and the European Society for Fuzzy Logic and Technology*. Paris: Atlantis Press, 2015, s. 792–798. ISBN 978-94-62520-77-6.
- BACHRATÝ, M. Asymptotically approaching the Moore bound by Cayley graphs. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 20–24. ISBN 978-80-227-4514-7.
- BODJANOVA, S. – KALINA, M. Coarsening of Fuzzy Partitions. In *SISY 2015 – IEEE 13th International Symposium on Intelligent Systems and Informatics: proceedings. Subotica, Serbia, 17. – 19. 9. 2015*. 1. vyd. s. I.] : IEEE, 2015, s. 127–132. ISBN 978-1-4673-9387-4.
- ČUNDERLÍK, R. – MIKULA, K. Nonlinear Diffusion Filtering of the GOCE-based Satellite-only mean Dynamic Topography. In *5th International GOCE User Workshop: proceedings. Paris, France, 25. – 28. 11. 2014 elektronický zdroj*. Noordwijk : ESA Communications, 2015, ISBN 978-92-9092-292-6.
- ČUNDERLÍK, R. Nonlinear Filtering of the Satellite-only Mean Dynamic Topography for Purposes to Estimate Offsets between Tide Gauges. In *Geodetické základy a geodynamika 2015: zborník príspevkov a abstraktov. Kočovce, SR, 8. – 9. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, Stavebná fakulta, 2015, s. 57–63. ISBN 978-80-227-4466-9.
- DANIEL, P. – MEDĽA, M. – MIKULA, K. – REMEŠÍKOVÁ, M. Reconstruction of Surfaces from Point Clouds Using a Lagrangian Surface Evolution Model. In *Scale Space and Variational Methods in Computer Vision: proceedings, 5th International Conference, SSVM 2015. Lège-Cap Ferret, France, 31. 5. – 4. 6. 2015 elektronický zdroj*. Switzerland : Springer, 2015, s. 589–600. ISBN 978-3319-18460-9.
- DE MIGUEL, L. – BUSTINCE, H. – FERNANDEZ, J. – KOLESÁROVÁ, A. – MESIAR, R. – DE BAETS, B. Construction of admissible orders for intervals. In BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. *AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 7. 2015*. Katowice : University of Silesia, 2015, s. 89–93. ISBN 978-83-8012-519-3.
- DE MIGUEL, L. – BUSTINCE, H. – INDURÁIN, E. – KOLESÁROVÁ, A. – MESIAR, R. – DE BAETS, B. Construction of admissible linear orders for pairs of intervals. In ALONSO, J M. – BUSTINCE, H. – REFORMAT,



- M. *Proceedings of the 2015 Conference of the International Fuzzy Systems Association and the European Society for Fuzzy Logic and Technology*. Paris: Atlantis Press, 2015, s. 1161–1167. ISBN 978-94-62520-77-6.
- DIBALA, M. About singular components of the archimax copula with piecewise linear generator and dependence function. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics*. Bratislava, SR, 28. 10. 2015 elektronický zdroj. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 25–30. ISBN 978-80-227-4514-7.
- DIBALA, M. – VAVRÍKOVÁ, L. Conic copulas – the special case of Archimax copula class. In *ISCAMI 2015: book of abstracts*. Kočovce, SR, 23. – 26. 4. 2015. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 12. ISBN 978-80-227-4350-1.
- FABIAN, M. – JANÁL, D. – DARULA, S. Method to create daylight reference year for Bratislava. In *Proceedings of the 28th CIE Session. Volume 1, Part 2: Manchester, United Kingdom, 28. 6. – 4. 7. 2015 elektronický zdroj*. Vienna: CIE Central Bureau, 2015, s. 1210–1216. ISBN 978-3-902842-55-8.
- FROLKOVIČ, P. Advection Equation in Education, Research and Applications. In *16. Konferencia košických matematikov: zborník abstraktov*. Herľany, SR, 25. – 28. 3. 2015. 1. vyd. Košice : Technická univerzita v Košiciach, 2015, s. 9. ISBN 978-80-553-2031-1.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. A new characterization of discrete Sugeno integrals on bounded distributive lattices. In *ESCIM 2015: proceedings of 7th European Symposium on Computational Intelligence and Mathematics*. Cádiz, Spain, 7. – 10. 10. 2015. 1. vyd. Cádiz : Universidad de Cádiz, 2015, s. 32–37. ISBN 978-84-608-2823-5.
- HANDLOVIČOVÁ, A. – RIEČANOVÁ, I. Finite Volume Method Solution to the Complex 2D Helmholtz Equation with Impedance Boundary Conditions. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland*. Kraków: Wydawnictwa AGH, 2015, s. 81–87. ISBN 978-83-7464-838-7.
- HLINĚNÁ, D. – KALINA, M. – KRÁL, P. On a Class of Uninorms which are not Locally Internal on the Boundary. In BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. *AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 7. 2015*. Katowice : University of Silesia, 2015, s. 131–136. ISBN 978-83-8012-519-3.
- HORANSKÁ, L. – ŠIPOŠOVÁ, A. A note on a generalization of the discrete Choquet integral. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland*. Kraków: Wydawnictwa AGH, 2015, s. 199–202. ISBN 978-83-7464-838-7.
- HRIŇÁKOVÁ, K. – ERSKINE, G. – ŠIRÁŇ, J. Orientably-regular maps on the group  $M(q^2)$ . In *8th Slovenian Conference on Graph Theory: abstracts*. Kranjska Gora, Slovenia, 21. – 27. 6. 2015. Ljubljana : Institute of Mathematics, Physics and Mechanics, 2015, s. 79.
- HRIŇÁKOVÁ, K. – ERSKINE, G. – ŠIRÁŇ, J. Regular maps on some types of matrix groups and their external symmetries. In *Graphs 2015: 50th Czech-Slovak Conference. Book of Abstracts*. Boží Dar, ČR, 1. – 5. 6. 2015. Plzeň : Institute for Theoretical Computer Science, 2015, s. 6.
- HRIŇÁKOVÁ, K. On external symmetries of regular maps on some types of matrix groups. In *ISCAMI 2015: book of abstracts*. Kočovce, SR, 23. – 26. 4. 2015. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 20. ISBN 978-80-227-4350-1.
- HRIŇÁKOVÁ, K. Which regular maps with automorphism group isomorphic to  $M(q^2)$  are self-dual?. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics*. Bratislava, SR, 28. 10. 2015 elektronický zdroj. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 31–36. ISBN 978-80-227-4514-7.
- HUCÍKOVÁ, V. Regular maps of given type and their external symmetries. In *ISCAMI 2015: book of abstracts*. Kočovce, SR, 23. – 26. 4. 2015. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 21. ISBN 978-80-227-4350-1.

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

- HUCÍKOVÁ, V. Self-dual and non-self-dual chiral regular maps. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 37–43. ISBN 978-80-227-4514-7.
- JURIGOVÁ, M. – MINÁROVÁ, M. – CHMÚRNY, I. Analysis of thermal performance of energy storage system. In *enviBUILD – Buildings and Environment 2015: international conference proceedings and abstracts. Bratislava, SR, 15. – 16. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 73. ISBN 978-80-227-4469-0.
- KALINA, M. – KRÁL, P. Construction of commutative and associative operations by paving. In ALONSO, J M. – BUSTINCE, H. – REFORMAT, M. *Proceedings of the 2015 Conference of the International Fuzzy Systems Association and the European Society for Fuzzy Logic and Technology*. Paris: Atlantis Press, 2015, s. 1201–1207. ISBN 978-94-62520-77-6.
- KALINA, M. – KRÁL, P. Uninorms on interval-valued fuzzy sets. In *ISFS 2015. The 2nd International Symposium on Fuzzy Sets. Golden Jubilee of Fuzzy Sets: Abstracts. Rzeszów, Poland, 3. – 4. 12. 2015*. Rzeszów : University of Rzeszów, Faculty of Mathematics and Natural Sciences, 2015, s. 21–22. ISBN 978-83-7996-190-0.
- KALINA, M. On a construction method for associative monotone operations. In FIŠEROVÁ, E. – HRON, K. – TALAŠOVÁ, J. *ODAM 2015 – Olomoucian Days of Applied Mathematics: book of abstracts, Olomouc, ČR, 20. – 22. 5. 2015*. 1. vyd. Olomouc : Univerzita Palackého in Olomouc, 2015, s. 39.
- KALINA, M. On associative commutative and monotone operations on some bounded lattices. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland*. Kraków: Wydawnictwa AGH, 2015, s. 207–209. ISBN 978-83-7464-838-7.
- KLEINOVÁ, V. Algorithms to compute the optic flow in image processing and their comparison. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 44–50. ISBN 978-80-227-4514-7.
- KLEINOVÁ, V. Algoritmy výpočtu optického toku v spracovaní obrazu. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 24. ISBN 978-80-554-1135-4.
- KLEINOVÁ, V. Velocity Field Extraction. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 23. ISBN 978-80-227-4350-1.
- KLEMENT, E P. – KOLESÁROVÁ, A. – MESIAR, R. – SAMINGER-PLATZ, S. Ultramodularity in the construction of binary copulas. In RAFAJLOWICZ, E. *12th Workshop on Stochastic Models, Statistics and Their Applications, February 16-20, 2015, Wrocław: Booklet of Abstracts*. s. 54–55.
- KLEMENT, E P. – MESIAR, R. Monotone Measures-Based Integrals. In KACPRZYK, J. – PEDRYCZ, W. *Springer Handbook of Computational Intelligence*. Berlin – Heidelberg: Springer-Verlag, 2015, s. 75–88. ISBN 978-3-662-43504-5.
- KNOR, M. – ŠKREKOVSKI, R. Wiener Index of Line Graphs. In DEHMER, M. – EMMERT-STREIB, F. *Quantitative Graph Theory*. Boca Raton: CRC Press Taylor & Francis Group, 2015, s. 279–301. ISBN 978-1-4665-8451-8.
- KOLESÁROVÁ, A. – MESIAR, R. – STUPŇANOVÁ, A. Axiomatic generalizations of OWA operators. In ALONSO, J M. – BUSTINCE, H. – REFORMAT, M. *Proceedings of the 2015 Conference of the International Fuzzy Systems Association and the European Society for Fuzzy Logic and Technology*. Paris: Atlantis Press, 2015, s. 441–446. ISBN 978-94-62520-77-6.
- KOLESÁROVÁ, A. – MESIAR, R. – STUPŇANOVÁ, A. Functional transformations of special classes of aggregation functions. In BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. *AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 2015*. Katowice : University of Silesia, 2015, s. 143–147. ISBN 978-83-8012-519-3.

- KOLLÁR, M. – MIKULA, K. – ČUNDERLÍK, R. Nonlinear diffusion filtering of data on closed surfaces. In *Earth and Environmental Sciences for Future Generations: 26th General Assembly of the International Union of Geodesy and Geophysics. Praha, ČR, 22. 6. – 2. 7. 2015 elektronický zdroj*. Potsdam : International Union of Geodesy and Geophysics, 2015.
- KOLLÁR, M. – MIKULA, K. Filtrácia geodetických dát na uzavretých plochách pomocou nového nelineárneho difúzneho filtra. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 25. ISBN 978-80-554-1135-4.
- KOLLÁR, M. – MIKULA, K. Filtration of geodetic data on a closed surface using the new nonlinear diffusion filter. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 51–57. ISBN 978-80-227-4514-7.
- KOLLÁR, M. – MINARECHOVÁ, Z. – MIKULA, K. Creation of digital terrain models using surface evolution. In *Earth and Environmental Sciences for Future Generations: 26th General Assembly of the International Union of Geodesy and Geophysics. Praha, ČR, 22. 6. – 2. 7. 2015 elektronický zdroj*. Potsdam : International Union of Geodesy and Geophysics, 2015.
- KOLLÁR, M. – MINARECHOVÁ, Z. – MIKULA, K. Creation of Digital Terrain Models using surface evolution. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 24. ISBN 978-80-227-4350-1.
- KOLLÁR, M. – MINARECHOVÁ, Z. Stress analysis of plate motions. In *Earth and Environmental Sciences for Future Generations: 26th General Assembly of the International Union of Geodesy and Geophysics. Praha, ČR, 22. 6. – 2. 7. 2015 elektronický zdroj*. Potsdam : International Union of Geodesy and Geophysics, 2015.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – KALICKÁ, J. – NGUYEN, C. Tail dependence of enriched class of perturbed copulas with modelling applications. In *Stochastic Modeling Data Analysis and Statistical Applications: 3rd Stochastic Modeling Techniques and Data Analysis (SMTDA) International Conference. Lisbon, Portugal, June 11-14, 2014*. 1. vyd. s. l.] : ISAST, 2015, s. 53–63. ISBN 978-618-5180-08-9.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – KALICKÁ, J. Perturbations of tail dependencies of copulas. In *BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 7. 2015*. Katowice : University of Silesia, 2015, s. 149–153. ISBN 978-83-8012-519-3.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. Predictive and Descriptive Models of Mutual Development of Economic Growth of Germany and Selected Non-traditional EU Countries. In *ITISE 2015 – International work-conference on Time Series: proceedings. Granada, Spain, 1. -3. 7. 2015*. Granada : Universidad de Granada, 2015, s. 55–64. ISBN 978-84-16292-20-2.
- KRIVÁ, Z. Evaluation of gradient norms on a consistent quadtree grid. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland*. Kraków: Wydawnictwa AGH, 2015, s. 68–75. ISBN 978-83-7464-838-7.
- KRIVÁ, Z. – PAPČO, J. Quadtree based finite volume method for diffusion equations with application of SAR imaged filtering. In *FIŠEROVÁ, E. – HRON, K. – TALAŠOVÁ, J. ODAM 2015 – Olomoucian Days of Applied Mathematics: book of abstracts, Olomouc, ČR, 20. – 22. 5. 2015*. 1. vyd. Olomouc : Univerzita Palackého in Olomouc, 2015, s. 45–47.
- LEHOCKI, F. – JACKULIAK, P. – ŽAKOVIČOVÁ, E. – BACIGÁL, T. ICT Based Diabetes Management System with Comprehensive Mobile Application: Clinical Usefulness Evaluation. In *MobiHealth 2015* .: Gent : ICST, 2015, ISBN 978-1-63190-088-4.
- LUCCA, G. – SANZ, J A. – DIMURO, G P. – BEDREGAL, B R C. – MESIAR, R. – KOLESÁROVÁ, A. – BUSTINCE, H. The Notion of Pre-aggregation Function. In *Modeling Decisions for Artificial Intelligence: proceedings of the 12th International conference, MDAI 2015. Skövde, Sweden, 21. -23. 9. 2015*. 1. vyd. s.l.] : Springer, 2015, s. 33–41. ISBN 978-3-319-23239-3.
- MACÁK, M. – ČUNDERLÍK, R. – MIKULA, K. – MINARECHOVÁ, Z. High-resolution modelling of altimetry-derived gravity data by solving the altimetry-gravimetry boundary-value problem. In *Earth and Environ-*

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

- mental Sciences for Future Generations: 26th General Assembly of the International Union of Geodesy and Geophysics. Praha, ČR, 22. 6. – 2. 7. 2015 elektronický zdroj. Potsdam : International Union of Geodesy and Geophysics, 2015.*
- MACÁK, M. – MEDĽA, M. – MIKULA, K. A new upwind treatment of the oblique derivative condition in geodetic boundary value problems. In *Geophysical Research Abstracts. Volume 17/2015: An Open Access Publication for Abstracts of the Earth, Planetary and Space Sciences elektronický zdroj. Göttingen : Copernicus Publications, 2015.*
- MACÁK, M. – MEDĽA, M. – MIKULA, K. The upwind scheme of the oblique derivative boundary condition in GBVP. In *Earth and Environmental Sciences for Future Generations: 26th General Assembly of the International Union of Geodesy and Geophysics. Praha, ČR, 22. 6. – 2. 7. 2015 elektronický zdroj. Potsdam : International Union of Geodesy and Geophysics, 2015.*
- MEDĽA, M. – MACÁK, M. – MIKULA, K. New Second Order Finite Volume Method for Oblique Derivative Boundary Value Problems. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 26. ISBN 978-80-227-4350-1.*
- MEDĽA, M. – MIKULA, K. Metóda konečných objemov pre Laplaceovu rovnicu s predpísanou šikmou deriváciou. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015. 1. vyd. Žilina : EDIS, 2015, s. 29. ISBN 978-80-554-1135-4.*
- MEDĽA, M. – MIKULA, K. Proof of second order convergence for the finite volume method on uniform grid for Laplace equation with Dirichlet boundary conditions. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 58–70. ISBN 978-80-227-4514-7.*
- MESIAR, R. Aggregation Functions Based on Integrals with Respect to Monotone Measures. In BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. *AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 7. 2015. Katowice : University of Silesia, 2015, s. 21–25. ISBN 978-83-8012-519-3.*
- MESIAR, R. Integrals Based on Monotone Measure: Optimization Tools and Special Functionals. In *Computer Information Systems and Industrial Management: proceedings. 14th IFIP TC 8 International Conference, CISIM 2015. Warsaw, Poland, 24. – 26. 9. 2015. Switzerland : Springer, 2015, s. 48–57. ISBN 978-3-319-24368-9.*
- MESIAR, R. ISCAMI 2015 Foreword. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 6. ISBN 978-80-227-4350-1.*
- MESIAR, R. – KOLESÁROVÁ, A. – KOMORNÍKOVÁ, M. Aggregation Functions on  $[0,1]$ . In KACPRZYK, J. – PEDRYCZ, W. *Springer Handbook of Computational Intelligence. Berlin – Heidelberg: Springer-Verlag, 2015, s. 61–74. ISBN 978-3-662-43504-5.*
- MESIAR, R. – KOLESÁROVÁ, A. On some construction methods for bivariate copulas. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland. Kraków: Wydawnictwa AGH, 2015, s. 210–212. ISBN 978-83-7464-838-7.*
- MESIAR, R. Non-standard measure requires non-standard approaches to the integral. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland. Kraków: Wydawnictwa AGH, 2015, s. 13–16. ISBN 978-83-7464-838-7.*
- MESIAR, R. On some dualities in the class of binary fusion functions. In *ISFS 2015. The 2nd International Symposium on Fuzzy Sets. Golden Jubilee of Fuzzy Sets: Abstracts. Rzeszów, Poland, 3. – 4. 12. 2015. Rzeszów : University of Rzeszów, Faculty of Mathematics and Natural Sciences, 2015, s. 3–5. ISBN 978-83-7996-190-0.*
- MESIAR, R. OWA operators and their generalizations. In FIŠEROVÁ, E. – HRON, K. – TALAŠOVÁ, J. *ODAM 2015 – Olomoucian Days of Applied Mathematics: book of abstracts, Olomouc, ČR, 20. – 22. 5. 2015. 1. vyd. Olomouc : Univerzita Palackého in Olomouc, 2015, s. 57–58.*
- MÉSZÁROSOVÁ, K. Benoit Mandelbrot a jeho fraktálna geometria. In *Historie matematiky: 36. mezinárodní*

- konferencie. Poděbrady, Česká republika, 21. – 25. 8. 2015. 1. vyd. Praha : Matfyzpress, 2015, s. 157–162. ISBN 978-80-7378-297-9.
- MIKULA, K. – FROLKOVIČ, P. – REMEŠÍKOVÁ, M. Finite volume methods for evolving surfaces. In *15th International Conference on Numerical Combustion: proceedings. Avignon, France, 19. – 22. 4. 2015.* Châtenay-Malabry Cedex : Laboratoire EM2C, 2015, s. 41.
- MINÁROVÁ, M. Heat Radiation in Enclosure – the Dominant Heat Transfer in an Insulating Vacuum-Like Layer. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland.* Kraków: Wydawnictwa AGH, 2015, s. 95–100. ISBN 978-83-7464-838-7.
- MINÁROVÁ, M. – SUMEC, J. Application of more complex rheological models in continuum mechanics. In *Modelování v mechanice 2015: sborník příspěvků vědecké konference. Ostrava, ČR, 28. – 29. 5. 2015 / elektronický zdroj.* 1. vyd. Ostrava : Vysoká škola báňská – Technická univerzita Ostrava, 2015, ISBN 978-80-248-3756-7.
- PETRÍK, M. – SARKOCI, P. Lukaszewicz-like triangular subnorms. In ALONSO, J. M. – BUSTINCE, H. – REFORMAT, M. *Proceedings of the 2015 Conference of the International Fuzzy Systems Association and the European Society for Fuzzy Logic and Technology.* Paris: Atlantis Press, 2015, s. 1282–1287. ISBN 978-94-62520-77-6.
- REMEŠÍKOVÁ, M. Možnosti vizualizácie 3D dát v softvéri Paraview. In *Geometria a jej aplikácie 2015: softvéry nielen pre geometriu. Zborník abstraktov. Bratislava, SR, 28. 1. 2015 elektronický zdroj.* Bratislava : Slovenská technická univerzita v Bratislave, 2015, ISBN 978-80-227-4371-6.
- RIEČANOVÁ, I. Complex-valued Solution of Helmholtz Equation by Finite Volume Method. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015.* 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 36. ISBN 978-80-227-4350-1.
- RIEČANOVÁ, I. Finite volume method scheme for the solution of Helmholtz equation. In SZARKOVÁ, D. – RICHTÁRIKOVÁ, D. – BALKO, Ľ. *Aplimat 2015.* Bratislava: Faculty of Mechanical Engineering Slovak University of Technology, 2015, s. 665–671. ISBN 978-80-227-4314-3.
- RIEČANOVÁ, I. Propagation of acoustic waves in the free 2D space and in the space with barrier. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj.* 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 71–76. ISBN 978-80-227-4514-7.
- SMREK, P. Level dependent capacities-based Choquet integrals and ordinal sums of aggregation functions. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015.* 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 39. ISBN 978-80-227-4350-1.
- STUPŇANOVÁ, A. Summations of Fuzzy numbers Based on Probabilistic Approach. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland.* Kraków: Wydawnictwa AGH, 2015, s. 273–277. ISBN 978-83-7464-838-7.
- SZATMÁRI, D. Results of optimization of cartographic projections in the European context. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015.* 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 42. ISBN 978-80-227-4350-1.
- SZOLGAY, J. – GAÁL, L. – BACIGÁL, T. – KOHNOVÁ, S. – HLAVČOVÁ, K. – BLÖSCHL, G. A process-based analysis of the suitability of copula types for flood peak-volume relationships. In *Earth and Environmental Sciences for Future Generations: 26th General Assembly of the International Union of Geodesy and Geophysics. Praha, ČR, 22. 6. – 2. 7. 2015 elektronický zdroj.* Potsdam : International Union of Geodesy and Geophysics, 2015.
- SZOLGAY, J. – GAÁL, L. – KOHNOVÁ, S. – HLAVČOVÁ, K. – VÝLETA, R. – BACIGÁL, T. – BLÖSCHL, G. A process-based analysis of the suitability of copula types for peak-volume flood relationships. In *Proceedings of the International Association of Hydrological Sciences [elektronický zdroj].* 2015, s. 183–187.
- ŠIPEKY, L. Číslo zlatého rezu je pre nás stále dôležité. In MATEJÍČKOVÁ, K. *Vôňa vedy.* 1. vyd. Martin : Vydavateľstvo Matice slovenskej, 2015, s. 108–110. ISBN 978-80-8115-206-1.

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

- ŠIPEKY, L. Softvér ako motivácia. In *Geometria a jej aplikácie 2015: softvéry nielen pre geometriu. Zborník abstraktov. Bratislava, SR, 28. 1. 2015 elektronický zdroj*. Bratislava : Slovenská technická univerzita v Bratislave, 2015, ISBN 978-80-227-4371-6.
- ŠIPEKY, L. – ŠIPOŠOVÁ, A. Constraint super- and sub-additive transformations. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland*. Kraków: Wydawnictwa AGH, 2015, s. 41–43. ISBN 978-83-7464-838-7.
- ŠIPOŠOVÁ, A. – ŠIPEKY, L. On aggregation functions with given superadditive and subadditive transformation. In *Proceedings of the Congress of Information Technology, Computational and Experimental Physics (CITCEP 2015) 18-20 December 2015, Kraków, Poland*. Kraków: Wydawnictwa AGH, 2015, s. 199–202. ISBN 978-83-7464-838-7.
- ŠIPOŠOVÁ, A. – ŠIPEKY, L. – RINDONE, F. Super- and Subadditive constructions of aggregation functions. In BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. *AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 7. 2015*. Katowice : University of Silesia, 2015, s. 215–218. ISBN 978-83-8012-519-3.
- ŠPIR, R. – MIKULA, K. Cell lineage tree reconstruction from time series of 3D images of zebrafish embryogenesis. In FIŠEROVÁ, E. – HRON, K. – TALAŠOVÁ, J. *ODAM 2015 – Olomoucian Days of Applied Mathematics: book of abstracts, Olomouc, ČR, 20. – 22. 5. 2015*. 1. vyd. Olomouc : Univerzita Palackého in Olomouc, 2015, s. 79–80.
- ŠPIR, R. – MIKULA, K. Matematika + Počítače = moderná technológia. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 33. ISBN 978-80-554-1135-4.
- ŠPIR, R. Tvorba softvéru na zobrazovanie dát v počítači pomocou geometrických modelov. In *Geometria a jej aplikácie 2015: softvéry nielen pre geometriu. Zborník abstraktov. Bratislava, SR, 28. 1. 2015 elektronický zdroj*. Bratislava : Slovenská technická univerzita v Bratislave, 2015, ISBN 978-80-227-4371-6.
- ŠPIR, R. Using the Direct3D API to display mathematical data with geometric models. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 43. ISBN 978-80-227-4350-1.
- TJEŠŠOVÁ, M. Mechanický model chrčtice človeka. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 35. ISBN 978-80-554-1135-4.
- TJEŠŠOVÁ, M. The analysis of the motion segment with the different modifications of the vertebral body base. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 77–84. ISBN 978-80-227-4514-7.
- TJEŠŠOVÁ, M. The Influence of the Vertebral Body Shape to the Mechanical Response of the Motion Segment. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 44. ISBN 978-80-227-4350-1.
- TOMEK, L. – MIKULA, K. Elimination of numerical tangential motion of vertices in mean curvature flow of surfaces. In *Advances in architectural, civil and environmental engineering: 25rd Annual PhD Student Conference on Architecture and Construction Engineering, Building Materials, Structural Engineering, Water and Environmental Engineering, Transportation Engineering, Surveying, Geodesy, and Applied Mathematics. Bratislava, SR, 28. 10. 2015 elektronický zdroj*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 85–94. ISBN 978-80-227-4514-7.
- TOMEK, L. – MIKULA, K. – REMEŠÍKOVÁ, M. Discrete duality finite volume method for mean curvature flow of surfaces. In *ISCAMI 2015: book of abstracts. Kočovce, SR, 23. – 26. 4. 2015*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 45. ISBN 978-80-227-4350-1.
- TOMEK, L. Modálna analýza fujary. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 34. ISBN 978-80-554-1135-4.
- URBÁN, J. Spracovanie obrazu v medicíne. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 36. ISBN 978-80-554-1135-4.

- VÁCLAVÍKOVÁ, Š. Skúsenosti z testovania vedomostí zo stredoškolskej matematiky. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 39. ISBN 978-80-554-1135-4.
- VAJSÁBLOVÁ, M. Konformné zobrazenia bodov elipsoidu a sféry do roviny a ich parametre. In VELICHOVÁ, D. – LÁVIČKA, M. – SZARKOVÁ, D. *Proceedings of the Slovak-Czech Conference on Geometry and Graphics: Terchová, Žilina, SR, 14. – 18. 9. 2015*. 1. vyd. Bratislava : Slovenská technická univerzita v Bratislave, 2015, s. 253–260. ISBN 978-80-227-4479-9.
- VAJSÁBLOVÁ, M. Matematická kartografia aj matematicky. In *47. konferencia slovenských matematikov: zborník. Jasná pod Chopkom, SR, 26. – 29. 11. 2015*. 1. vyd. Žilina : EDIS, 2015, s. 37. ISBN 978-80-554-1135-4.
- VAJSÁBLOVÁ, M. Optimalizácia skreslenia na ploche územia Slovenska v konformnom kuželovom zobrazení. In *21. kartografická konferencie – Všetchny tváře kartografie: sborník abstraktů. Lednice, ČR, 3. – 4. 9. 2015*. 1. vyd. Praha : Kartografická společnost ČR, 2015, s. 26. ISBN 978-80-260-8586-7.
- ŽDÍMALOVÁ, M. – BOHUMEL, T. – PLACHÁ, K. – EL FALOUGY, H. – WEISMANN, P. Grafové algoritmy a ich aplikácia pri hodnotení apoptózy. In *Čerpajme z minulosti, ktorá nás navedie na budúcnosť*. 1. vyd. Bratislava : PROPRINT, 2015, s. 215–219. ISBN 978-80-89747-06-1.
- ŽDÍMALOVÁ, M. – KRIVÁ, Z. – BOHUMEL, T. Graph cuts in image processing. In SZARKOVÁ, D. – RICHTÁRIKOVÁ, D. – BALKO, L. *Aplimat 2015*. Bratislava: Faculty of Mechanical Engineering Slovak University of Technology, 2015, s. 774–786. ISBN 978-80-227-4314-3.

## Závěrečná práce

- BERANOVÁ, N. – BACIGÁL, T. *Analýza súčasného stavu a prognóza ekonomického vývoja jednotlivých regiónov Slovenska vzhľadom na nominálnu mzdu*. Bakalárska práca. 2015.
- BRÁDŇANSKÁ, N. – HRIŇÁKOVÁ, K. *Konštrukcie malých grafov daného stupňa a obvodu*. Bakalárska práca. 2015.
- CRUZ, S. – MACÁK, M. *Využitie metódy konečných prvkov pri zjednotení lokálnych výškových systémov*. Bakalárska práca. 2015.
- DANIEL, P. – REMEŠÍKOVÁ, M. *Rekonštrukcia 3D objektov z mračna bodov pomocou priamej evolúcie plôch*. Diplomová práca. 2015.
- DOBŇAK, P. – ČUNDERLÍK, R. *Bezmriežkové metódy na riešenie okrajových úloh v geodézii*. Diplomová práca. 2015.
- GAÁLOVÁ, Z. – REMEŠÍKOVÁ, M. *Matematické modelovanie koreňovej sústavy viniča*. Bakalárska práca. 2015.
- HAJDINOVÁ, K. – KNOR, M. *Wienerov index v orientovaných stromoch*. Bakalárska práca. 2015.
- HORNÁČEK, P. – KOLLÁR, J. *Matematické modelovanie prirodzeného jazyka*. Bakalárska práca. 2015.
- HORNÁČEK, T. – MIKULA, K. *Numerické metódy na segmentáciu 4D obrazu*. Bakalárska práca. 2015.
- JASAŇ, P. – ŠPIR, R. *Spracovanie dát získaných automatickými segmentačnými algoritmi*. Diplomová práca. 2015.
- JUHÁSOVÁ, Ľ. – MINÁROVÁ, M. *Viskoelastické modely, konštitutívne rovnice a aplikácie*. Diplomová práca. 2015.
- KÓSA, B. – MIKULA, K. *3D point cloud surface reconstruction by using level set methods*. Diplomová práca. 2015.
- KOTOROVÁ, D. – HANDLOVIČOVÁ, A. *Numerical Methods for Nonlinear Parabolic Differential Equations*. Dizertačná práca. 2015.
- LAZÍKOVÁ, K. – KOMORNÍKOVÁ, M. *Analýza súčasného stavu a prognóza vývoja priemernej mesačnej nezamestnanosti do 25 rokov vo vybraných krajinách EÚ*. Bakalárska práca. 2015.
- MACÁK, M. *Numerical Methods in Geodesy*. Dizertačná práca. Bratislava : 2015. 65 s.
- MAJOR, J. – ŽDÍMALOVÁ, M. *Simulované žihanie a jeho aplikácie v teórii grafov*. Bakalárska práca. 2015.
- MAZÚCH, J. – FROLKOVIČ, P. *Numerické riešenie diferenciálnej rovnice neceločíselného rádu*. Bakalárska práca. 2015.
- MESZÁROS, M. – SARKOCI, P. *Optimálny transport a optický tok v registrácii obrazu*. Diplomová práca. 2015.
- OBOŇOVÁ, Ž. – ŠIPOŠOVÁ, A. *Optimalizácia dopravných úloh*. Bakalárska práca. 2015.
- PAFČO, F. – BALAZOVJECH, M. *Numerické modelovanie lesných požiarov Lagrangeovskými metódami*. Diplomová práca. 2015.
- PETROVIČ, P. – KRIVÁ, Z. *Vytvorenie softvéru pre spracovanie družicových dát adaptívnymi metódami*. Diplomová práca. 2015.
- REMEŠÍKOVÁ, M. *Applications of segmentation in embryogenesis image analysis*. Habilitačná práca. 2015.
- SMÍŠEK, M. – MIKULA, K. *Analysis of 3D and 4D Images of Organisms in Embryogenesis*. Dizertačná práca. 2015.
- STUPŇANOVÁ, A. *Monotónne miery a agregáčné funkcie*. Habilitačná práca. 2015.
- SZATMÁRI, D. – VAJSÁBLOVÁ, M. *Tvorba a optimalizácia kartografického zobrazenia*. Dizertačná práca. 2015.
- ŠELIGA, A. – SARKOCI, P. *Rekonštrukcia hyperspektrálneho obrazu z difrakčného skenu*. Bakalárska práca. 2015.



- ŠKABLA, P. – FROLKOVIČ, P. *Semi-implicitné metódy vysokého radu presnosti pre rovnicu advekcie*. Diplomová práca. 2015.
- ŠPIR, R. – MIKULA, K. *Parallel algorithms for the solution of partial differential equations – Numerical methods for analysis of embryogenesis images*. Dizertačná práca. 2015.
- TÜCSÖK, N. – MURÍN, J. *Modelovanie a simulácia priestorového termomechanického aktuátora*. Diplomová práca. 2015.
- VAJSÁBLOVÁ, M. *Aspekty tvorby kartografického zobrazenia pre územie Slovenska*. Habilitačná práca. Bratislava : 2015. 108 s.
- VAJSÁBLOVÁ, M. *Aspekty tvorby kartografického zobrazenia pre územie Slovenska*. Habilitačná práca. 2015.
- VRANKOVÁ, A. – PALKO, M. *Modelovanie hraničnej vrstvy v atmosfére*. Diplomová práca. 2015.

## Zborník

BACZYŃSKI, M. – DE BAETS, B. – MESIAR, R. *AGOP 2015: proceedings of the 8th International Summer School on Aggregation Operators (AGOP 2015), Katowice, Poland, 7. – 10. 7. 2015.* Katowice : University of Silesia, 2015. 244 strany. ISBN 978-83-8012-519-3.

## **Autorský index**

**Publikačná činnosť**

Členenie podľa druhu

Názov pracoviska: Katedra matematiky a deskriptívnej geometrie (SvF)

Obdobie: 2015

Vytlačené: 21. 12. 2020

© Akademický informačný systém STU