

Slovenská technická univerzita v Bratislave

Publikačná činnosť

Členenie podľa druhu

Názov pracoviska: Katedra matematiky a deskriptívnej geometrie (SvF)

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Články v časopisoch

- AGAHI, H. – MEHRI-DEHNAVI, H. – MESIAR, R. Monte Carlo integration for Choquet integral. *International Journal of Intelligent Systems*, 34. s. 1348–1358.
- AMBROZ, M. – BALAŽOVJECH, M. – MEDĽA, M. – MIKULA, K. Numerical modeling of wildland surface fire propagation by evolving surface curves. *Advances in Computational Mathematics*, 45. s. 1067–1103.
- ASICI, E. – MESIAR, R. Direct product of nullnorms on bounded lattices. *Journal of Intelligent and Fuzzy Systems*, 36. s. 5745–5756.
- BACIGÁL, T. – KOMORNÍKOVÁ, M. – KOMORNÍK, J. State-of-the-art in modeling nonlinear dependence among many random variables with copulas and application to financial indexes. *Journal of Automation, Mobile Robotics & Intelligent Systems*, 13. s. 84–91.
- BACHRATÝ, M. – ŠIAGIOVÁ, J. – ŠIRÁŇ, J. Asymptotically approaching the Moore bound for diameter three by Cayley graphs. *Journal of Combinatorial Theory. Series B*, s. 203–217.
- BALLOVÁ, D. Global and local trend analysis and change-point analysis of selected financial and market indices. *Journal of Automation, Mobile Robotics & Intelligent Systems*, 13. s. 56–63.
- BIELEK, B. – KLEM, J. – MACÁK, M. Physical Cavity of a double skin facade as a source of pre-heated air in the winter season for the heat recovery unit of a facade. *Slovak Journal of Civil Engineering*, 27. s. 7–10.
- BORKOTOKEY, S. – HAZARIKA, P. – MESIAR, R. Cooperative games with multiple attributes. *International Journal of General Systems*, 48. s. 825–842.
- CANDELORO, D. – MESIAR, R. – SAMBUCINI, A R. A special class of fuzzy measures: Choquet integral and applications. *Fuzzy Sets and Systems*, s. 83–99.
- CAYLI, G D. – KARACAL, F. – MESIAR, R. On internal and locally internal uninorms on bounded lattices. *International Journal of General Systems*, 48. s. 235–259.
- DALFÓ, C S. – FIOL, M A. – MILLER, M. – RYAN, J. – ŠIRÁŇ, J. An algebraic approach to lifts of digraphs. *Discrete Applied Mathematics*, s. 68–76.
- DALFÓ, C S. – FIOL, M A. – PAVLÍKOVÁ, S. – ŠIRÁŇ, J. Spectra and eigenspaces of arbitrary lifts of graphs. *Acta Mathematica Universitatis Comenianae*, 88. s. 593–600.
- DALFÓ, C S. – FIOL, M A. – ŠIRÁŇ, J. The spectra of lifted digraphs. *Journal of algebraic combinatorics*, 50. s. 419–426.
- D'AZEVEDO, A B. – CATALANO, D A. – ŠIRÁŇ, J. Bi-rotary Maps of Negative Prime Characteristic. *Annals of Combinatorics*, 23. s. 27–50.
- DE HIERRO, A F R L. – SESMA-SARA, M. – ŠPIRKOVÁ, J. – LAFUENTE, J. – PRADERA, A. – MESIAR, R. – BUSTINCE, H. Curve-based monotonicity: a generalization of directional monotonicity. *International Journal of General Systems*, 48. s. 523–553.
- DRONIOU, J. – MEDĽA, M. – MIKULA, K. Design and analysis of finite volume methods for elliptic equations with oblique derivatives; application to Earth gravity field modelling. *Journal of Computational Physics*, s. 2019.
- ĎURIGOVÁ, M. – BALLOVÁ, D. – HLAVČOVÁ, K. Analyses of Monthly Discharges in Slovakia Using Hydrological Exploratory Methods and Statistical Methods. *Slovak Journal of Civil Engineering*, 27. s. 36–43.
- ĎURIGOVÁ, M. – HLAVČOVÁ, K. – KOMORNÍKOVÁ, M. – KALICKÁ, J. – BALLOVÁ, D. – BACIGÁL, T. Analýza zmien priemerných mesačných prietokov na Slovensku v posledných desaťročiach. *Acta hydrologica Slovaca*, 20. s. 10–21.
- EXOO, G. – JAJCAY, R. – MAČAJ, M. – ŠIRÁŇ, J. On the defect of vertex-transitive graphs of given degree and diameter. *Journal of Combinatorial Theory. Series B*, s. 322–340.
- FRASER, J. – JEANS, O. – ŠIRÁŇ, J. Regular self-dual and self-Petrie-dual maps of arbitrary valency. *Ars Mathematica Contemporanea*, 16. s. 403–410.
- HAHN, J. – MIKULA, K. – FROLKOVIČ, P. – MEDĽA, M. – BASARA, B. Iterative inflow-implicit outflow-explicit finite volume scheme for level-set equations on polyhedron meshes. *Computers and Mathematics with*

- Applications*, 77. s. 1639–1654.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. On generating sets of the clone of aggregation functions on finite lattices. *Information Sciences*, s. 38–47.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. On generation of aggregation functions on infinite lattices. *Soft Computing*, 23. s. 7279–7286.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. – TORRA, V. A note on some algebraic properties of discrete Sugeno integrals. *Fuzzy Sets and Systems*, s. 110–120.
- HALVONIK, J. – KALICKÁ, J. – MAJTÁNOVÁ, L. – MINÁROVÁ, M. Reliability of models aimed at evaluating the punching resistance of flat slabs without transverse reinforcement. *Engineering Structures*, s. 627–636.
- HRIŇÁKOVÁ, K. – KNOR, M. – ŠKREKOVSKI, R. An inequality between variable Wiener index and variable Szeged index. *Applied Mathematics and Computation*, s. 2019.
- JAJCAJ, R. – LI, C H. – ŠIRÁŇ, J. – WANG, Y. Regular and orientably-regular maps with quasiprimitive automorphism groups on vertices. *Geometriae Dedicata*, s. 389–418.
- JENČA, G. Two monads on the category of graphs. *Mathematica Slovaca*, 69. s. 257–266.
- JIN, L. – KALINA, M. – MESIAR, R. – BORKOTOKEY, S. Characterizations of the possibility-probability transformations and some applications. *Information Sciences*, s. 281–290.
- JIN, L. – MESIAR, R. – KALINA, M. – ŠPIRKOVÁ, J. – BORKOTOKEY, S. Generalized phi-transformations of aggregation functions. *Fuzzy Sets and Systems*, s. 124–141.
- JIN, L. – MESIAR, R. – YAGER, R R. Melting Probability Measure With OWA Operator to Generate Fuzzy Measure: The Crescent Method. *IEEE Transactions on fuzzy systems*, 27. s. 1309–1316.
- JIN, L. – MESIAR, R. – YAGER, R R. On Scatters of Probability Distributions and OWA Weights Collections. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, 27. s. 773–788.
- JIN, L. – MESIAR, R. – YAGER, R R. Ordered Weighted Averaging Aggregation on Convex Poset. *IEEE Transactions on fuzzy systems*, 27. s. 612–617.
- JIN, L. – MESIAR, R. – YAGER, R R. – QIN, J. Dynamic weights allocation according to uncertain evaluation information. *International Journal of General Systems*, 48. s. 33–47.
- KALICKÁ, J. – MINÁROVÁ, M. – HALVONIK, J. – MAJTÁNOVÁ, L. Statistical analysis of models for punching resistance ensuring. *Journal of Automation, Mobile Robotics & Intelligent Systems*, 13. s. 49–55.
- KALINA, M. Some remarks on n-uninorms in IF-sets. *Notes on Intuitionistic Fuzzy Sets* ;, 25. s. 21–29.
- KNOR, M. – KOMORNÍK, J. – ŠKREKOVSKI, R. – TEPEH, A. Unicyclic graphs with the maximal value of Graovac-Pisanski index. *Ars Mathematica Contemporanea*, 17. s. 455–466.
- KNOR, M. – ŠKREKOVSKI, R. On the minimum distance in a k-vertex set in a graph. *Applied Mathematics and Computation*, s. 99–104.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Chemical Graphs with the Minimum Value of Wiener Index. *MATCH*, 81. s. 119–132.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. On the Graovac-Pisanski index of a graph. *Acta Mathematica Universitatis Comenianae*, 88. s. 867–870.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Trees with the maximal value of Graovac-Pisanski index. *Applied Mathematics and Computation*, s. 287–292.
- KOLEŠÁROVÁ, A. – KOUCHAKINEJAD, F. – MESIAR, R. Additive Aggregation Functions: Generalizations and Modifications of Additivity. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, 27. s. 39–58.
- KOLEŠÁROVÁ, A. – MASSANET, S. – MESIAR, R. – RIERA, J V. – TORRENS, J. Polynomial constructions of fuzzy implication functions: The quadratic case. *Information Sciences*, s. 60–79.
- KULCZYCKI, P. – KACPRZYK, J. – KÓCZY, L T. – MESIAR, R. Preface – Special section on Information Technology for Systems Research. *International Journal of Applied Mathematics and Computer Science*, 29. s. 425–426.

Články v časopisoch

- LÓPEZ, N. – PÉREZ-ROSÉS, H. – PUJOLÁS, J. – ŽDÍMALOVÁ, M. Construction of extremal mixed graphs of diameter two. *Discrete Applied Mathematics*, s. 204–211.
- MEHRI-DEHNAVI, H. – AGAHI, H. – MESIAR, R. Pseudo-exponential distribution and its statistical applications in econophysics. *Soft Computing*, 23. s. 357–363.
- MESIAR, R. – KOLESÁROVÁ, A. – GÓMEZ, D. – MONTERO, J. Set-based extended aggregation functions. *International Journal of Intelligent Systems*, 34. s. 2039–2054.
- MESIAR, R. – SHEIKHI, A. – KOMORNÍKOVÁ, M. Random noise and perturbation of copulas. *Kybernetika*, 55. s. 422–434.
- MESIAR, R. – STUPŇANOVÁ, A. A note on CC-integral. *Fuzzy Sets and Systems*, s. 106–109.
- MIHAILOVIĆ, B. – KALINA, M. – ŠTRBOJA, M. On the generalized k-order additivity for absolutely monotone set functions. *Soft Computing*, 23. s. 6043–6050.
- MIKULOVÁ, K. – JAROLÍMEK, I. – BACIGÁL, T. – HEGEDÜSOVÁ, K. – MÁJEKOVÁ, J. – MEDVECKÁ, J. – SLABEJOVÁ, D. – ŠIBÍK, J. – ŠKODOVÁ, I. – ZALIBEROVÁ, M. – ŠIBÍKOVÁ, M. The Effect of Non-Native Black Pine (*Pinus nigra* J. F. Arnold) Plantations on Environmental Conditions and Undergrowth Diversity. *Forests*, 10. s. 7.
- NÁNÁSIOVÁ, O. – VALÁŠKOVÁ, L. – ČERŇANOVÁ, V. Probability measures and logical connectives on quantum logics. *Journal of Automation, Mobile Robotics & Intelligent Systems*, 13. s. 64–73.
- OUYANG, Y. – LI, J. – MESIAR, R. A sufficient condition of equivalence of the Choquet and the pan-integral. *Fuzzy Sets and Systems*, s. 100–105.
- PATERNAIN, D. – DE MIGUEL, L. – OCHOA, G. – LIZASOAIN, I. – MESIAR, R. – BUSTINCE, H. The interval-valued Choquet integral based on admissible permutations. *IEEE Transactions on fuzzy systems*, 27. s. 1638–1647.
- PAVLÍKOVÁ, S. – ŠIRÁŇ, J. Inverting non-invertible weighted trees. *Australasian journal of combinatorics*, 75. s. 246–255.
- PU, X. – JIN, L. – MESIAR, R. – YAGER, R R. Continuous parameterized families of RIM quantifiers and quasi-preference with some properties. *Information Sciences*, s. 24–32.
- RAY, N. – OBERLANDER, J. – FROLKOVIČ, P. Numerical investigation of a fully coupled micro-macro model for mineral dissolution and precipitation. *Computational Geosciences*, 23. s. 1173–1192.
- SANTOS, H. – COUSO, I. – BEDREGAL, B. – TAKÁČ, Z. – MINÁROVÁ, M. – ASIAIN, A. – BARRENECHEA, E. – BUSTINCE, H. Similarity measures, penalty functions, and fuzzy entropy from new fuzzy subhood measures. *International Journal of Intelligent Systems*, 34. s. 1281–1302.
- SARKOCIOVÁ REMEŠÍKOVÁ, M. – ŠAGÁT, M. – NOVYSEDLÁK, P. Discrete Lagrangian algorithm for finding geodesics on triangular meshes. *Applied Mathematical Modelling*, 76. s. 396–427.
- SESMA-SARA, M. – DE MIGUEL, L. – DE HIERRO, A F R L. – LAFUENTE, J. – MESIAR, R. – BUSTINCE, H. Pointwise directional increasingness and geometric interpretation of directionally monotone functions. *Information Sciences*, 501. s. 236–247.
- SESMA-SARA, M. – LAFUENTE, J. – ROLDÁN, A. – MESIAR, R. – BUSTINCE, H. Strengthened ordered directionally monotone functions. Links between the different notions of monotonicity. *Fuzzy Sets and Systems*, s. 151–172.
- SLABEJOVÁ, D. – BACIGÁL, T. – HEGEDÜSOVÁ, K. – MÁJEKOVÁ, J. – MEDVECKÁ, J. – MIKULOVÁ, K. – ŠIBÍKOVÁ, M. – ŠKODOVÁ, I. – ZALIBEROVÁ, M. – JAROLÍMEK, I. Comparison of the understory vegetation of native forests and adjacent Robinia pseudoacacia plantations in the Carpathian-Pannonian region. *Forest Ecology and Management*, 439. s. 28–40.
- ŠELIGA, A. Decomposition integral without alternatives, its equivalence to Lebesgue integral, and computational algorithms. *Journal of Automation, Mobile Robotics & Intelligent Systems*, 13. s. 41–48.
- ŠELIGA, A. – ŠIPOŠOVÁ, A. – ŠIRÁŇ, J. Lifting continuity properties of aggregation functions to their super- and sub-additive transformations. *Journal of Mahani Mathematical Research Center*, 8. s. 37–51.
- TOMEK, L. – MIKULA, K. Discrete duality finite volume method with tangential redistribution of points for surfaces evolving by mean curvature. *ESAIM: Mathematical Modelling and Numerical Analysis (ESAIM: M2AN)*,

53. s. 1797–1840.

VAJSÁBLOVÁ, M. Geometrická a matematická analýza mapy Bohemiae Rosa, Blaeuových historických máp zo 17. storočia a Augustovo zobrazenie. *G – Slovenský časopis pre geometriu a grafiku*, 16. s. 19–38.

WANG, Z. – JIN, L. – YAGER, R. R. – MESIAR, R. – KALINA, M. – ŠPIRKOVÁ, J. – BORKOTOKEY, S. Ordered Weighted Sum in infinite sequences environment with applications. *Journal of Intelligent and Fuzzy Systems*, 36. s. 2787–2792.

ZHU, C. – JIN, L. – MESIAR, R. – YAGER, R. R. – PATERNAIN, D. – BUSTINCE, H. Nested formulation paradigms for induced ordered weighted averaging aggregation for decision-making and evaluation. *International Journal of Intelligent Systems*, 34. s. 3046–3057.

ZHU, C. – MESIAR, R. – YAGER, R. R. – MERIGO, J. – QIN, J. – FENG, X. – JIN, L. Two-layer preference models with methodologies using induced aggregation in management administration and decision making. *Journal of Intelligent and Fuzzy Systems*, 37. s. 1213–1221.

ŽDÍMALOVÁ, M. – MAJOR, J. – KOPÁNI, M. Graph cutting and its application to biological data. *Open Physics*, 17. s. 468–479.

ŽDÍMALOVÁ, M. – MARUŠČÁKOVÁ, L. – BUCOVÁ, M. – SOVA, O. – KOPÁNI, M. Analyses of tumor cells by mathematical models. *Bratislava Medical Journal*, 74. s. 650–657.

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

KNOR, M. – TOMEK, L. *Optimalizácia 2*. Bratislava : Spektrum STU, 2019. ISBN 978-80-227-4918-3.

MÉSZÁROSOVÁ, K. – TEREŇOVÁ, Z. *Deskriptívna geometria I: Stredové premietanie a lineárna perspektíva [elektronický zdroj]*. Bratislava : Spektrum STU, 2019. ISBN 978-80-227-4929-9.

MINARECHOVÁ, Z. – MACÁK, M. *Zbierka riešených úloh z Matematiky 2 pre odbor GaK*. Bratislava : Spektrum STU, 2019. ISBN 978-80-227-4967-1.

Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty

- ÁBRAHÁMOVÁ, A. One of the approaches to the creation of conformal projections. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2019, s. 13–19. ISBN 978-80-227-4972-5.
- ÁBRAHÁMOVÁ, A. – VAJSÁBLOVÁ, M. Kinetic Curves in Cartographic Projections. In VELICHOVÁ, D. – LÁVIČKA, M. – SZARKOVÁ, D. *Proceedings of the slovak-czech conference on geometry and graphics 2019*. Bratislava: Vydavateľstvo SCHK, 2019, s. 27–40. ISBN 978-80-8208-024-0.
- ARMENTIA, J. – RODRÍGUEZ, I. – FUMANAL-IDOCIN, J. – BUSTINCE, H. – MINÁROVÁ, M. – JURIO, A. Gravitational Clustering Algorithm Generalization by Using an Aggregation of Masses in Newton Law. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 172–182. ISBN 978-3-030-19493-2.
- ASICI, E. – MESIAR, R. The Relation Between F-partial Order and Distributivity Equation. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 106–114. ISBN 978-3-030-19493-2.
- BACIGÁL, T. – KOMORNÍKOVÁ, M. – KOMORNÍK, J. Analysis of Relationship Among V4 Countries and Germany by Their Gross Domestic Products and Copula Models. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 232–243. ISBN 978-3-030-19493-2.
- BALLOVÁ, D. Statistical analysis of the achievement in examination of Mathematics 2. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2019, s. 20–24. ISBN 978-80-227-4972-5.
- BALLOVÁ, D. – ŠELIGA, A. Detecting long term and abrupt changes in hydrological processes. In SKIADAS, C H. *Book of abstracts of the 18th Applied Stochastic Models and Data Analysis International Conference with Demographics Workshop – ASMDA 2019*. [s.l.]: International Society for the Advancement of Science and Technology, 2019, s. 27–28.
- BIELEK, B. – KRAJČÍK, M. – BUDAY, P. – MACÁK, M. Two-Stage System for Utilization of Renewable Solar Energy in Modern Building Facade Technology. In *Central Europe towards Sustainable Building (CESB19)*. Bristol: IOP Publishing, 2019.
- BODJANOVA, S. – KALINA, M. Uninorms on Bounded Lattices with Given Underlying Operations. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 183–194. ISBN 978-3-030-19493-2.
- BUSTINCE, H. – FERNANDEZ, J. – HORANSKÁ, Ľ. – MESIAR, R. – STUPŇANOVÁ, A. On Some Generalizations of the Choquet Integral. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 151–159. ISBN 978-3-030-19493-2.
- ČUNDERLÍK, R. – MACÁK, M. – MEDĽA, M. – MIKULA, K. – MINARECHOVÁ, Z. Numerical Methods for Solving the Oblique Derivative Boundary Value Problems in Geodesy. In FREEDEN, W. – RUMMEL, R. *Handbuch der Geodäsie*. Wiesbaden: Springer Spektrum, 2019, ISBN 978-3-662-46900-2.
- ČURPEK, J. – BIELEK, B. – BUDAY, P. – MACÁK, M. – KLEM, J. – KRAJČÍK, M. Optimization of air cavity of a double-skin transparent façade for HVAC strategy. In *Advanced Building Skins*. Lucerne: Advanced Building Skins, 2019, s. 80–89. ISBN 978-3-9524883-0-0.
- DE MIGUEL, L. – SESMA-SARA, M. – FERNANDEZ, J. – MESIAR, R. – BUSTINCE, H. Geometrical Differences in the Generalizations of Monotonicity Conditions. In *Book of abstracts of the 11th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT 2019)*. Ostrava: University of Ostrava, 2019, s. 47. ISBN 978-80-7599-110-2.
- ĎURIGOVÁ, M. – BALLOVÁ, D. – HLAVČOVÁ, K. Analyses of Monthly Discharges in Slovakia Using Hydrological Exploratory Methods. In *Proceedings of 3rd International Electronic Conference on Water Sciences (ECWS-3)*. Basel: MDPI, 2019, ISSN 2504-3900.
- ĎURIGOVÁ, M. – BALLOVÁ, D. The detection of changes in mean monthly discharges in Slovakia. In KALICZ, P. – HLAVČOVÁ, K. – KOHNOVÁ, S. – RATTAYOVÁ, V. – GRIBOVŠZKI, Z. *HydroCarpath 2019. Catchment Processes in Regional Hydrology: Coupling Field Experiments and Data Assimilation into Process*

Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty

- Understanding and Modeling in Carpathian Basins*. Sopron: University of Sopron Press, 2019, s. 23. ISBN 978-963-334-349-4.
- FRANEK, M. – LENDELOVÁ, J. – MACÁK, M. – HUBOVÁ, O. Pressure distribution on duopitch roofs for agricultural structures. In BALKOVÁ, M. – SZABÓOVÁ, T. *Rural Buildings in European Regions RUBER 2019. Architectura – Construction – Technology – Safety – Logistics / Vidiecke stavby v európskych regiónoch RUBER 2019. Architektúra – konštrukcie – technológie – bezpečnosť – logistika [elektronický zdroj]*. Nitra, Slovakia: Slovenská poľnohospodárska univerzita v Nitre, 2019, s. 12–16. ISBN 978-80-552-2068-0.
- FRANEK, M. – MACÁK, M. – HUBOVÁ, O. A CFD approach as a base wind study of pressure distribution on the complex buildings. In KOŇAS, P. *Proceedings of 27th SVSFEM ANSYS Users' Group Meeting and Conference 2019*. Brno: SVS FEM, 2019, s. 18–24. ISBN 978-80-905525-6-2.
- FRANEK, M. – MACÁK, M. – HUBOVÁ, O. The use of a plastic mesh fabrics for reduction of the wind loads. In *Nové poznatky ve vědě a výzkumu z oblasti pozemního stavitelství*. Ostrava: VŠB – Technická univerzita Ostrava, 2019, s. 32–37. ISBN 978-80-248-4199-1.
- FROLKOVIČ, P. Semi-implicit time discretizations of advection level set equations. In *Efficient high-order time discretization methods for PDEs*. Neapol: University of Napoli Federico II, 2019, s. 27.
- HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. Preface. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, ISBN 978-3-030-19493-2.
- HLINĚNÁ, D. – KALINA, M. A Characterization of Uninorms by Means of a Pre-order they Induce. In NOVÁK, V. – MAŘÍK, V. *Proceedings of the 11th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT 2019)*. Paris: Atlantis Press, 2019, s. 595–601. ISBN 978-94-6252-770-6.
- HRIŇÁKOVÁ, K. O grafoch s daným počtom vrcholov a blokov a maximálnym Wienerovým indexom. In *51. konferencia slovenských matematikov*. Žilina: EDIS, 2019, s. 29. ISBN 978-80-554-1609-0.
- HUBOVÁ, O. – FRANEK, M. – MACÁK, M. Wind Loads and Their Reduction on Mesh Fabrics. In *New Trends in Dynamics of Structures*. Kaunas: JVE International, 2019, s. 123–127.
- HUBOVÁ, O. – MACÁK, M. Optimal Design of Building for Urban Wind Energy Utilization. In *World Multi-disciplinary Civil Engineering, Architecture, Urban Planning Symposium (WMCAUS 2018)*. Bristol: IOP Publishing, 2019.
- JÁNOŠ, P. A note on the McKay-Miller-Širáň graphs as Abelian lifts of multigraphs of diameter two. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2019, s. 25–29. ISBN 978-80-227-4972-5.
- JÁNOŠ, P. An upper bound for large graphs of given degree and diameter two arising from Abelian lifts of complete bipartite multigraphs. In CZAP, J. *Graphs 2019*. Košice: Technical University of Košice, 2019, s. 11–12.
- JIN, L. – KALINA, M. – MESIAR, R. – BORKOTOKEY, S. – ŠPIRKOVÁ, J. Generalized phi-transformations and n-uninorms. In *CoDIT 2019*. Danvers: IEEE, 2019, s. 506–511. ISBN 978-1-7281-0521-5.
- KALINA, M. Uninorms and nullnorms and their idempotent versions on bounded posets. In TORRA, V. *Modeling Decisions for Artificial Intelligence*. Cham (Switzerland): Springer Nature, 2019, s. 126–137. ISBN 978-3-030-26772-8.
- KNOR, M. Graovac-Pisanski index for trees. In CZAP, J. *Graphs 2019*. Košice: Technical University of Košice, 2019, s. 15.
- KNOR, M. – MAJSTOROVIĆ, S. – ŠKREKOVSKI, R. Some results on Wiener index of a graph: an overview. In DOŠLIĆ, T. – MARTINJAK, I. *Proceedings of the 2nd Croatian Combinatorial Days*. Zagreb: University of Zagreb Faculty of Civil Engineering, 2019, s. 49–56. ISBN 978-953-8168-33-8.
- KOLEŠÁROVÁ, A. – MESIAR, R. Fuzzy implicators related to (quasi-)copulas. In NOVÁK, V. – MAŘÍK, V. *Proceedings of the 11th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT 2019)*. Paris: Atlantis Press, 2019, s. 235–240. ISBN 978-94-6252-770-6.
- KOLLÁR, M. – ČUNDERLÍK, R. – MIKULA, K. Fully automatic along-track pre-processing of the GOCE gravity gradients in the gradiometer reference frame. In *Geophysical Research Abstracts. Volume 21/2019*. Göttingen: Copernicus Publications, 2019.

- KOLLÁR, M. – MIKULA, K. – AMBROZ, M. – ŠIBÍKOVÁ, M. Softvér na segmentáciu chránených území Natura 2000. In *51. konferencia slovenských matematikov*. Žilina: EDIS, 2019, s. 37. ISBN 978-80-554-1609-0.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – BACIGÁL, T. Analysis of Dependence among Growth Rates of GDP of V4 Countries Using 4dimensional Vine Copulas. In SKIADAS, C H. – BOZEMAN, J R. *Data Analysis and Applications 2*. Hoboken (USA): John Wiley & Sons, 2019, s. 37–47. ISBN 978-1-78630-447-6.
- KÓSA, B. – MIKULA, K. Segmentácia 3D obrazu podporovaná mračnom bodov. In *51. konferencia slovenských matematikov*. Žilina: EDIS, 2019, s. 38. ISBN 978-80-554-1609-0.
- KRIVÁ, Z. – STAŠOVÁ, O. Speckle removing anisotropic diffusion based on PDE models discretized by the finite volume method. In SZARKOVÁ, D. – RICHTÁRIKOVÁ, D. – LETAVAJ, P. *Aplimat 2019, 18th Conference on Applied Mathematics*. Bratislava: Slovenská technická univerzita v Bratislave, 2019, s. 700–714. ISBN 978-80-227-4884-1.
- MACÁK, M. – BIELEK, B. Influence of the temperature in the ventilated double-skin transparent façade. In KOŇAS, P. *Proceedings of 27th SVSFEM ANSYS Users' Group Meeting and Conference 2019*. Brno: SVS FEM, 2019, s. 11–17. ISBN 978-80-905525-6-2.
- MALÁ, R. – JENISOVÁ, Z. – PORUBSKÁ, M. – BALLOVÁ, D. Design of experiments in the laboratory and the use of statistical methods for data analysis. In SZARKOVÁ, D. – RICHTÁRIKOVÁ, D. – LETAVAJ, P. *Aplimat 2019, 18th Conference on Applied Mathematics*. Bratislava: Slovenská technická univerzita v Bratislave, 2019, s. 782–792. ISBN 978-80-227-4884-1.
- MALÁ, R. – JENISOVÁ, Z. – TOKÁROVÁ, B. – BALLOVÁ, D. A didactic experiment aimed at determining the effectiveness of selected teaching methods in the teaching process of chemistry. In *ICERI 2019 Proceedings*. Seville: IATED Academy, 2019, s. 3238–3246. ISBN 978-84-09-14755-7.
- MESIAŘ, R. – KOLESÁROVÁ, A. Construction of Fuzzy Implication Functions Based on F-chains. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAŘ, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 315–326. ISBN 978-3-030-19493-2.
- MESIAŘ, R. – KOLESÁROVÁ, A. On a construction of fuzzy implication functions. In *The 4th International Symposium on Fuzzy Sets Uncertainty Modelling ISFS 2019*. Rzesów, Poľsko: Uniwersytet Rzeszowski Wydawnictwo Uniwersytetu Rzeszowskiego, 2019, s. 15–16. ISBN 978-83-7996-680-6.
- MESIAŘ, R. – KOLESÁROVÁ, A. – STUPŇANOVÁ, A. – YAGER, R R. Normed Utility Functions: Some Recent Advances. In DOUMPOS, M. – FIGUEIRA, J R. *New Perspectives in Multiple Criteria Decision Making*. Cham: Springer Nature, 2019, s. 133–149. ISBN 978-3-030-11481-7.
- MESIAŘ, R. – KOLESÁROVÁ, A. – ŠELIGA, A. – MONTERO, J. – GÓMEZ, D. Set-based extended functions. In TORRA, V. *Modeling Decisions for Artificial Intelligence*. Cham (Switzerland): Springer Nature, 2019, s. 41–51. ISBN 978-3-030-26772-8.
- MESIAŘ, R. – KOLESÁROVÁ, A. Utility Functions and Constrained Additivity. In *CoDIT 2019*. Danvers: IEEE, 2019, s. 274–278. ISBN 978-1-7281-0521-5.
- PATERNAIN, D. – JIN, L. – MESIAŘ, R. – VAVŘÍKOVÁ, L. – BUSTINCE, H. OWA Operators Based on Admissible Permutations. In *Proceedings of the 2019 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*. New Jersey: Institute of Electrical and Electronics Engineers, 2019, ISBN 978-1-5386-1728-1.
- RÜCKSCHLOSSOVÁ, T. Softvérové inovované študijné materiály z deskriptívnej geometrie. In *51. konferencia slovenských matematikov*. Žilina: EDIS, 2019, s. 46–47. ISBN 978-80-554-1609-0.
- SESMA-SARA, M. – DE MIGUEL, L. – DE HIERRO, A F R L. – ŠPIRKOVÁ, J. – MESIAŘ, R. – BUSTINCE, H. Description and Properties of Curve-Based Monotone Functions. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAŘ, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 195–204. ISBN 978-3-030-19493-2.
- SESMA-SARA, M. – DE MIGUEL, L. – MESIAŘ, R. – FERNANDEZ, J. – BUSTINCE, H. Interval-valued pre-aggregation functions: a study of directional monotonicity of interval-valued functions. In *Proceedings of the 2019 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*. New Jersey: Institute of Electrical and Electronics Engineers, 2019, ISBN 978-1-5386-1728-1.
- SESMA-SARA, M. – DE MIGUEL, L. – MESIAŘ, R. – FERNANDEZ, J. – BUSTINCE, H. Local Properties of Strengthened Ordered Directional and Other Forms of Monotonicity. In KEARFOTT, R B. *Fuzzy Techniques: Theory and Applications*. Cham: Springer Nature, 2019, s. 33–43. ISBN 978-3-030-21919-2.

Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty

- STAŠOVÁ, O. – KRIVÁ, Z. Filtrácia radarových dát získaných technológiou SAR pomocou anizotropných difúzných modelov. In *51. konferencia slovenských matematikov*. Žilina: EDIS, 2019, s. 48–49. ISBN 978-80-554-1609-0.
- STUPŇANOVÁ, A. Decisions based on deviation functions. In *CoDIT 2019*. Danvers: IEEE, 2019, s. 245–249. ISBN 978-1-7281-0521-5.
- STUPŇANOVÁ, A. Scientometric Indices Based on Integrals and Their Adaptation in Different Domains. In SEKI, H. *Integrated Uncertainty in Knowledge Modelling and Decision Making*. Cham: Springer Nature, 2019, s. 3–12. ISBN 978-3-030-14814-0.
- STUPŇANOVÁ, A. – SMREK, P. Generalized deviation functions and construction of aggregation functions. In NOVÁK, V. – MAŘÍK, V. *Proceedings of the 11th Conference of the European Society for Fuzzy Logic and Technology (EUSFLAT 2019)*. Paris: Atlantis Press, 2019, s. 96–100. ISBN 978-94-6252-770-6.
- STUPŇANOVÁ, A. – VIVONA, D. – DIVARI, M. Pseudo-Additions and Shift Invariant Aggregation Functions. In HALAŠ, R. – GAGOLEWSKI, M. – MESIAR, R. *New Trends in Aggregation Theory*. Cham (Switzerland): Springer Nature Switzerland AG, 2019, s. 75–82. ISBN 978-3-030-19493-2.
- ŠELIGA, A. Asymmetric collection integral. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2019, s. 30–34. ISBN 978-80-227-4972-5.
- ŠELIGA, A. Decomposition integrals for interval-valued functions. In KÓCZY, L. T. – MEDINA, J. *Book of abstracts of ESCIM 2019*. Cádiz: University of Cádiz, 2019, s. 9–10. ISBN 978-84-09-14600-0.
- ŠELIGA, A. New types of decomposition integrals for real- and interval-valued functions. In GRABISCH, M. – KROUPA, T. – SAMINGER-PLATZ, S. – VETTERLEIN, T. *Set Functions in Games and Decision*. Austria: Johannes Kepler Universität Linz, 2019, s. 90–92.
- ŠELIGA, A. Properties of super- and sub-additive transformations and its modifications. In *Fuzzy and Rough Mathematical Structures*. Riga: Latvian Mathematical Society, 2019, s. 28.
- ŠELIGA, A. Quintic polynomials as copulas. In CHLEBOUN, J. – OLIVÍK, S. *ISCAMI 2019*. Prague: Czech Technical University in Prague, 2019, s. 62–63.
- ŠIBÍK, J. – FRANKLIN, S. B. – OLEJNICZAK, P. – SAMULAK, E. – NECHAJ, J. – BACIGÁL, T. – ŠIBÍKOVÁ, M. Structural and functional changes of montane spruce forests after the disturbances. In DIEKMANN, M. *Abstracts of the 62nd Annual Symposium of the International Association for Vegetation Science*. [s.l.]: International Association for Vegetation Science, 2019, s. 221.
- TAKÁČ, Z. – MINÁROVÁ, M. – BUSTINCE, H. – FERNANDEZ, J. Restricted Similarity Functions, Distances and Entropies with Intervals Using Total Orders. In SEKI, H. *Integrated Uncertainty in Knowledge Modelling and Decision Making*. Cham: Springer Nature, 2019, s. 432–442. ISBN 978-3-030-14814-0.
- VAJSÁBLOVÁ, M. Geometry and art on the Bohemiae Rosa and on Bleau's historical maps in 17th century. In SZARKOVÁ, D. – RICHTÁRIKOVÁ, D. – LETAVAJ, P. *Aplimat 2019, 18th Conference on Applied Mathematics*. Bratislava: Slovenská technická univerzita v Bratislave, 2019, s. 1251–1264. ISBN 978-80-227-4884-1.
- ŽDÍMALOVÁ, M. – FECKOVÁ ŠKRABULÁKOVÁ, E. Magic with fractals. In SZARKOVÁ, D. – RICHTÁRIKOVÁ, D. – LETAVAJ, P. *Aplimat 2019, 18th Conference on Applied Mathematics*. Bratislava: Slovenská technická univerzita v Bratislave, 2019, s. 1326–1344. ISBN 978-80-227-4884-1.
- ŽDÍMALOVÁ, M. – ZATKALÍK, D. – WEISMANN, P. – KUBÍKOVÁ, E. – EL FALOUGY, H. Vhodná segmentácia obrazu – nutnosť pri kvalitnej analýze obrazu v medicíne. In KUBÍKOVÁ, E. – WEISMANN, P. – JAKIMOVÁ, J. *Anatómia – 100 rokov LF UK*. Trebišov: k-PRINT, 2019, s. 190–194. ISBN 978-80-973545-0-3.

Závěrečná práce

- BEHUN, M. – ŠIAGIOVÁ, J. *Cayley graphs of given diameter or girth on linear groups*. Bakalárska práca. 2019.
- BEJDÁK, M. – MIKULA, K. *Riešenie úloh anizotropickej difúzie na nerovnomerných výpočtových sieťach*. Bakalárska práca. 2019.
- BERAN, B. – BALLOVÁ, D. *Aplikácia štatistických metód na predikciu a vyhodnotenie úspešného ukončenia bakalárskeho stupňa štúdia*. Bakalárska práca. 2019.
- BOŠANSKÁ, B. – MINÁROVÁ, M. *Vlhkostno teplotné modely v stavebných konštrukciách*. Bakalárska práca. 2019.
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- DECKÝ, M. – MESIAR, R. *Návrh multikriteriálnych rozhodovacích metód a ich aplikácie v oblasti športu a hier*. Dizertačná práca. 2019.
- FRATRIČ, P. – BACIGÁL, T. *Graphical probability models and machine learning*. Diplomová práca. 2019.
- GAJDOŠOVÁ, N. – FROLKOVIČ, P. *Numerické metódy na určenie skeletonu vzdialenostnej funkcie*. Bakalárska práca. 2019.
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- MACKO, P. – KALICKÁ, J. *Štatistická analýza presnosti modelov spoľahlivosti konštrukcií vzhľadom na pretlačenie*. Bakalárska práca. 2019.
- OBRTÁČOVÁ, T. – HANDLOVIČOVÁ, A. *Konečno – objemová numerická schéma vývoja kriviek Lagrangeovou metódou a jej porovnanie so schémami založenými na Eulerovskom princípe*. Diplomová práca. 2019.
- RIEČANOVÁ, I. – HANDLOVIČOVÁ, A. *Numerical methods and their use in acoustical simulations*. Dizertačná práca. 2019.
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- ŽÁKOVÁ, D. – FROLKOVIČ, P. *Numerické metódy na riešenie úlohy o optickom toku*. Diplomová práca. 2019.
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