

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>8</b>
<b>Príspevky v zborníkoch, kapitoly v monografiách/učebniciach, abstrakty</b>	<b>9</b>
<b>Záverečná práca</b>	<b>16</b>
<b>Autorský index</b>	<b>17</b>

## Články v časopisoch

- AGAHI, H. – MESIAR, R. On Choquet-Pettis Expectation of Banach-Valued Functions: A Counter Example. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, 26. s. 255–259.
- ANDOVA, V. – KNOR, M. – ŠKREKOVSKI, R. Distance based indices in nanotubical graphs: part 1. *Journal of Mathematical Chemistry*, 56. s. 2801–2815.
- ANDOVA, V. – KNOR, M. – ŠKREKOVSKI, R. Distance based indices in nanotubical graphs: part 2. *Journal of Mathematical Chemistry*, 56. s. 3076–3088.
- ARIAS-GARCÍA, J D J. – MESIAR, R. – KLEMENT, E P. – SAMINGER-PLATZ, S. – DE BAETS, B. Extremal Lipschitz continuous aggregation functions with a given diagonal section. *Fuzzy Sets and Systems*, 346. s. 147–167.
- ASIAIN, M J. – BUSTINCE, H. – MESIAR, R. – KOLESÁROVÁ, A. – TAKÁČ, Z. Negations With Respect to Admissible Orders in the Interval-Valued Fuzzy Set Theory. *IEEE Transactions on fuzzy systems*, 26. s. 556–568.
- BISWAKARMA, R. – BORKOTOKEY, S. – MESIAR, R. Solidarity Value and Solidarity Share Functions for TU Fuzzy Games. *Advances in Fuzzy Systems*, s. 2018.
- BORKOTOKEY, S. – MESIAR, R. – LI, J. – KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. Event-based transformations of capacities and invariance. *Soft Computing*, 22. s. 6291–6297.
- BOTUR, M. – HALAŠ, R. – MESIAR, R. – PÓCS, J. On generating of idempotent aggregation functions on finite lattices. *Information Sciences*, 430. s. 39–45.
- BUSTINCE, H. – BARRENECHEA, E. – SESMA-SARA, M. – LAFUENTE, J. – DIMURO, G P. – MESIAR, R. – KOLESÁROVÁ, A. Ordered Directionally Monotone Functions: Justification and Application. *IEEE Transactions on fuzzy systems*, 26. s. 2237–2250.
- DAS, S. – GUHA, D. – MESIAR, R. Information Measures in the Intuitionistic Fuzzy Framework and Their Relationships. *IEEE Transactions on fuzzy systems*, 26. s. 1626–1637.
- DECKÝ, M. – MESIAR, R. – STUPŇANOVÁ, A. Deviation-based aggregation functions. *Fuzzy Sets and Systems*, 332. s. 29–36.
- DE HIERRO, A F R L. – BUSTINCE, H. – FERNÁNDEZ, J. – MESIAR, R. – ROLDÁN, C. Two novel methodologies for considering aggregation functions by implicit equations and minimization problems. *European Journal of Operational Research*, 270. s. 670–681.
- DEHMIRY, A H. – MASHINCHI, M. – MESIAR, R. Hesitant L-Fuzzy Sets. *International Journal of Intelligent Systems*, 33. s. 1027–1042.
- DORIA, S. – DUTTA, B. – MESIAR, R. Integral representation of coherent upper conditional prevision with respect to its associated Hausdorff outer measure: a comparison among the Choquet integral, the pan-integral and the concave integral. *International Journal of General Systems*, 47. s. 569–592.
- FROLKOVIČ, P. – MIKULA, K. Semi-implicit second order schemes for numerical solution of level set advection equation on Cartesian grids. *Applied Mathematics and Computation*, 329. s. 129–142.
- GRIGGS, T. – PSOMAS, C. – ŠIRÁŇ, J. Maximum genus embeddings of Latin squares. *Glasgow Mathematical Journal*, 60. s. 495–504.
- HALAŠ, R. – KURAČ, Z. – MESIAR, R. – PÓCS, J. Binary generating set of the clone of idempotent aggregation functions on bounded lattices. *Information Sciences*, 462. s. 367–373.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. On Linear Approximations of Sugeno Integrals on Bounded Distributive Lattices. *IEEE Transactions on fuzzy systems*, 26. s. 3177–3181.
- HAZARIKA, P. – BORKOTOKEY, S. – MESIAR, R. Bi-cooperative games in bipolar fuzzy settings. *International Journal of General Systems*, 47. s. 51–66.
- HORANSKÁ, Ľ. – ŠIPOŠOVÁ, A. A generalization of the discrete Choquet and Sugeno integrals based on a fusion function. *Information Sciences*, 451. s. 83–99.
- HRIŇÁKOVÁ, K. Bratislavská integrovaná doprava. *MATMIX*, 23. s. 13–14.

- HRIŇÁKOVÁ, K. – HRIŇÁK, M. Kanárske ostrovy. *Mladý vedec*, s. 2–5.
- HRIŇÁKOVÁ, K. – HRIŇÁK, M. Nobelova cena za fyziku 2018. *Mladý vedec*, s. 2–5.
- HRIŇÁKOVÁ, K. – HRIŇÁK, M. Tenerife. *Mladý vedec*, s. 2–8.
- HRIŇÁKOVÁ, K. – KNOR, M. – ŠKREKOVSKI, R. On a conjecture about the ratio of Wiener index in iterated line graphs. *The Art of Discrete and Applied Mathematics*, 1. s. 2018.
- HRIŇÁKOVÁ, K. – ŠELIGA, A. Remarks on super-additive and sub-additive transformations of aggregation functions. *Tatra Mountains Mathematical Publications*, 72. s. 55–66.
- JENČA, G. Effect Algebras as Presheaves on Finite Boolean Algebras. *ORDER*, 35. s. 525–540.
- JIN, L. – KALINA, M. – MESIAR, R. – BORKOTOKEY, S. Discrete Choquet Integrals for Riemann Integrable Inputs With Some Applications. *IEEE Transactions on fuzzy systems*, 26. s. 3164–3169.
- JIN, L. – MESIAR, R. – BORKOTOKEY, S. – KALINA, M. Certainty aggregation and the certainty fuzzy measures. *International Journal of Intelligent Systems*, 33. s. 759–770.
- JIN, L. – MESIAR, R. Cognitive Integrals With Its Generalized and Adapted Forms. *IEEE Transactions on fuzzy systems*, 26. s. 1960–1969.
- JIN, L. – MESIAR, R. – QIAN, G. Weighting Models to Generate Weights and Capacities in Multicriteria Group Decision Making. *IEEE Transactions on fuzzy systems*, 26. s. 2225–2236.
- KAKATI, P. – BORKOTOKEY, S. – MESIAR, R. – RAHMAN, S. Interval neutrosophic hesitant fuzzy Choquet integral in multicriteria decision making. *Journal of Intelligent and Fuzzy Systems*, 35. s. 3213–3231.
- KLEMENT, E P. – MESIAR, R. L-Fuzzy Sets and Isomorphic Lattices: Are All the "New" Results Really New?. *Mathematics*, 6. s. 9.
- KNOR, M. – MAJSTOROVIĆ, S. – ŠKREKOVSKI, R. Graphs preserving Wiener index upon vertex removal. *Applied Mathematics and Computation*, 338. s. 25–32.
- KNOR, M. – MAJSTOROVIĆ, S. – ŠKREKOVSKI, R. Graphs whose Wiener index does not change when a specific vertex is removed. *Discrete Applied Mathematics*, 238. s. 126–132.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Convexity result and trees with large Balaban index. *Applied Mathematics and Nonlinear Sciences*, 3. s. 433–446.
- KNOR, M. – ŠKREKOVSKI, R. – TEPEH, A. Mathematical Aspects of Balaban Index. *MATCH*, 79. s. 685–716.
- KOLEŠÁROVÁ, A. – LI, J. – MESIAR, R. k-additive aggregation functions and their characterization. *European Journal of Operational Research*, 265. s. 985–992.
- LUCCA, G. – SANZ, J A. – DIMURO, G P. – BEDREGAL, B R C. – BUSTINCE, H. – MESIAR, R. C-F-integrals: A new family of pre-aggregation functions with application to fuzzy rule-based classification systems. *Information Sciences*, 435. s. 94–110.
- MAJSTOROVIĆ, S. – KNOR, M. – ŠKREKOVSKI, R. Graphs preserving total distance upon vertex removal. *Electronic Notes in Discrete Mathematics*, 68. s. 107–112.
- 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. *Journal of geodesy*, 92. s. 1–19.
- MEDVECKÁ, S. – IVÁNKOVÁ, O. – MACÁK, M. – MICHALCOVÁ, V. Determination of Pressure Coefficient for a High-Rise Building with Atypical Ground Plan. *Civil and environmental engineering*, 14. s. 138–145.
- MESIAR, R. – BORKOTOKEY, S. – JIN, L. – KALINA, M. Aggregation functions and capacities. *Fuzzy Sets and Systems*, 346. s. 138–146.
- MESIAR, R. – BORKOTOKEY, S. – JIN, L. – KALINA, M. Aggregation Under Uncertainty. *IEEE Transactions on fuzzy systems*, 26. s. 2475–2478.
- MESIAR, R. – KOLEŠÁROVÁ, A. – BUSTINCE, H. – FERNANDEZ, J. Dualities in the class of extended Boolean functions. *Fuzzy Sets and Systems*, 332. s. 78–92.
- MESIAR, R. – KOLEŠÁROVÁ, A. k-maxitive aggregation functions. *Fuzzy Sets and Systems*, 346. s. 127–137.

- MESIAR, R. – KOLESÁROVÁ, A. On the fuzzy set theory and aggregation functions: History and some recent advances. *Iranian Journal of Fuzzy Systems*, 15. s. 1–12.
- MESIAR, R. – KOLESÁROVÁ, A. – STUPŇANOVÁ, A. Quo vadis aggregation?. *International Journal of General Systems*, 47. s. 97–117.
- MESIAR, R. – KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. – MASHINCHI, M. OWA Operators on Complete Lattices. *IEEE Transactions on fuzzy systems*, 26. s. 3884–3887.
- MESIAR, R. – KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. On fuzzy solution of a linear optimization problem with max-aggregation function relation inequality constraints. *Annals of Operational Research*, 269. s. 1–2.
- MESIAR, R. – STUPŇANOVÁ, A. – YAGER, R R. Extremal symmetrization of aggregation functions. *Annals of Operational Research*, 269. s. 1–2.
- MESIAR, R. – ŠIPEKY, L. – GUPTA, P. – JIN, L. Aggregation of OWA operators. *IEEE Transactions on fuzzy systems*, 26. s. 284–291.
- MINÁROVÁ, M. – PATERNAIN, D. – JURIO, A. – RUIZ-ARANGUEN, J. – TAKÁČ, Z. – BUSTINCE, H. Modifying the gravitational search algorithm: A functional study. *Information Sciences*, 430. s. 87–103.
- PATERNAIN, D. – CAMPIÓN, M J. – MESIAR, R. – PERFILIEVA, I. – BUSTINCE, H. Internal Fusion Functions. *IEEE Transactions on fuzzy systems*, 26. s. 487–503.
- PETRÍK, M. – SARKOCI, P. Continuous weakly cancellative triangular subnorms: I. Their web-geometric properties. *Fuzzy Sets and Systems*, 332. s. 93–110.
- QIN, J. – JIN, L. – MESIAR, R. – YAGER, R R. Eliciting Different Lattice Dominance Points to Evaluate Distribution Information. *IEEE Transactions on fuzzy systems*, 26. s. 3888–3892.
- RIEČANOVÁ, I. – HANDLOVIČOVÁ, A. Study of the numerical solution to the wave equation. *Acta Mathematica Universitatis Comenianae*, 87. s. 317–332.
- SAMINGER-PLATZ, S. – KOLESÁROVÁ, A. – MESIAR, R. – KLEMENT, E P. A note on a generalized Frank functional equation. *Fuzzy Sets and Systems*, 335. s. 48–54.
- SESMA-SARA, M. – DE MIGUEL, L. – PAGOLA, M. – BURUSCO, A. – MESIAR, R. – BUSTINCE, H. New measures for comparing matrices and their application to image processing. *Applied Mathematical Modelling*, 61. s. 498–520.
- STAŠOVÁ, O. – KRIVÁ, Z. Regularized coherence enhancing filtering. *Tatra Mountains Mathematical Publications*, 72. s. 107–121.
- ŠIPOŠOVÁ, A. – ŠIRÁŇ, J. Continuous functions with given super-additive and sub-additive transformations. *International Journal of General Systems*, 47. s. 842–848.
- ŠIRÁŇ, J. Super- and sub-additive envelopes of aggregation functions: Interplay between local and global properties and approximation. *Iranian Journal of Fuzzy Systems*, 15. s. 13–21.
- TAKÁČ, Z. – MINÁROVÁ, M. – MONTERO, J. – BARRENECHEA, E. – FERNANDEZ, J. – BUSTINCE, H. Interval-valued fuzzy strong S-subsethood measures, interval-entropy and P-interval-entropy. *Information Sciences*, 432. s. 97–115.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. Convergence of the numerical scheme for regularised Riemannian mean curvature flow equation. *Tatra Mountains Mathematical Publications*, 72. s. 123–140.
- TJEŠŠOVÁ, M. – SOKOL, M. – VELÍSKOVÁ, P. Assessment of dynamic effects on spine due to different dynamic loading or various seating position in a car. *Dynamics and Acoustics in Automotive Engineering: conference proceedings. 32nd International Conference on Vibroengineering. Brno, Czech Republic, May 22-24th 2018*, s. 164–169.
- TOMEK, L. – REMEŠÍKOVÁ, M. – MIKULA, K. Computing minimal surfaces by mean curvature flow with area-oriented tangential redistribution. *Acta Mathematica Universitatis Comenianae*, 87. s. 55–72.
- TVRDÁ, K. – MINÁROVÁ, M. Computation of definite integral over repeated integral. *Tatra Mountains Mathematical Publications*, 72. s. 141–154.
- WANG, J. – KALINA, M. – MESIAR, R. – JIN, L. On some characteristics and related properties for OWF and

RIM quantifier. *International Journal of Intelligent Systems*, 33. s. 1283–1300.

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

MÉSZÁROSOVÁ, K. – RÜCKSCHLOSSOVÁ, T. – TEREŇOVÁ, Z. *Deskriptívna geometria II: Druhá časť – Priamkové, translačné, klinové a kanálové plochy [elektronický zdroj]*. Bratislava : Spektrum STU, 2018. ISBN 978-80-227-4767-7.

VAJSÁBLOVÁ, M. – SZATMÁRI, D. *Matematická kartografia v príkladoch*. Bratislava : Spektrum STU, 2018. 134 s. ISBN 978-80-227-4857-5.



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

- AMBROZ, M. – MIKULA, K. New Lagrangian surface forest fire propagation model. In *Advances in Forest Fire Research 2018*. Coimbra: Coimbra University Press, 2018, s. 577–587. ISBN 978-989-26-16-506.
- AMBROZ, M. – MIKULA, K. Prehľad simulátorov šírenia lesných požiarov. In *50. konferencia slovenských matematikov*. Žilina: EDIS, 2018, s. 17. ISBN 978-80-554-1500-0.
- AMBROZ, M. – MIKULA, K. Topological changes of curves in the forest fire propagation modelling. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 117. ISBN 978-80-89829-05-7.
- BACIGÁL, T. – KOMORNÍKOVÁ, M. – KOMORNÍK, J. Multidimensional copula models of dependencies between selected international financial market indexes. In *Contemporary Computational Science*. Kraków: AGH University of Science and Technology Press, 2018, s. 92. ISBN 978-83-66016-22-4.
- BACIGÁL, T. Meditation on statistical properties of the Archimedean copulas stochastic interpretation. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 21. ISBN 978-80-8040-560-1.
- BACIGÁL, T. On Some Applications of Williamson's Transform in Copula Theory. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 21–30. ISBN 978-3-319-59305-0.
- BACZYŃSKI, M. – DRYGAŚ, P. – MESIAR, R. Monotonicity in the Construction of Ordinal Sums of Fuzzy Implications. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 189–199. ISBN 978-3-319-59305-0.
- BACZYŃSKI, M. – JAYARAM, B. – MESIAR, R. On  $\alpha$ -Migrativity of Fuzzy Implications and the Generalised Laws of Importation. In *SCIS-ISIS 2018*. Piscataway: Institute of Electrical and Electronics Engineers, 2018, s. 581–596. ISBN 978-1-5386-2633-7.
- BALAŽOVJECH, M. The new analytical solutions for eikonal and level set equations. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 118. ISBN 978-80-89829-05-7.
- BALLOVÁ, D. Change-point detection of selected hydrological time series. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2018, s. 14–19. ISBN 978-80-227-4864-3.
- BALLOVÁ, D. Trend analysis and detection of change-points of selected financial and market indices. In *Contemporary Computational Science*. Kraków: AGH University of Science and Technology Press, 2018, s. 94. ISBN 978-83-66016-22-4.
- BALLOVÁ, D. Trend analysis and change-point analysis of selected hydrological time series. In PERFILIEVA, I. *ISCAMI 2018*. Ostrava: University of Ostrava, 2018, s. 23. ISBN 978-80-7464-112-1.
- BODJANOVA, S. – KALINA, M. Nullnorms and T-operators on Bounded Lattices: Coincidence and Differences. In *Information Processing and Management of Uncertainty in Knowledge-Based Systems. Theory and Foundations*. [s.l.]: Springer, 2018, s. 160–170. ISBN 978-3-319-91473-2.
- BODJANOVA, S. – KALINA, M. Point-Interval-Valued Sets: Aggregation and Construction. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 9–20. ISBN 978-3-319-59305-0.
- BODJANOVA, S. – KALINA, M. Uninorms on Bounded Lattices – Recent Development. In *Advances in Fuzzy Logic and Technology 2017 – Volume 1*. Cham (Switzerland): Springer, 2018, s. 224–234. ISBN 978-3-319-66830-7.
- BORKOTOKEY, S. – HAZARIKA, P. – MESIAR, R. Fuzzy cooperative games with multiple attributes. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 29–30. ISBN 978-80-8040-560-1.
- BORKOTOKEY, S. – KOMORNÍKOVÁ, M. – LI, J. – MESIAR, R. Aggregation Functions, Similarity and Fuzzy Measures. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 223–228. ISBN 978-3-319-59305-0.
- BUSTINCE, H. – FERNANDEZ, J. – MESIAR, R. – STUPŇANOVÁ, A. Aggregation Operators in Fuzzy Sets.

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

- In WEBSTER, J. G. *Wiley Encyclopedia of Electrical and Electronics Engineering*. New York: John Wiley & Sons, 2018, ISBN 9780471346081.
- BUSTINCE, H. – MESIAR, R. – KOLESÁROVÁ, A. – SESMA-SARA, M. – FERNANDEZ, J. – GALAR, M. – ELKANO, M. A New Extension of Monotonicity: Ordered Directional Monotonicity. In *Advances in Fuzzy Logic and Technology 2017 – Volume 1*. Cham (Switzerland): Springer, 2018, s. 295–305. ISBN 978-3-319-66830-7.
- BUSTINCE, H. – MINÁROVÁ, M. – FERNANDEZ, J. – SESMA-SARA, M. – MARCO-DETCART, C. – RUIZ-ARANGUREN, J. A Generalization of the Gravitational Search Algorithm. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 162–171. ISBN 978-3-319-59305-0.
- ČUNDERLÍK, R. – MACÁK, M. – MEDLA, M. – MIKULA, K. – MINARECHOVÁ, Z. On the solution of the oblique derivative boundary-value problem in geodesy using various numerical concepts. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 119. ISBN 978-80-89829-05-7.
- ČUNDERLÍK, R. Meshless boundary collocation techniques for processing the GOCE gravity gradients in spatial domain. In *Geophysical Research Abstracts. Volume 20/2018*. Göttingen: Copernicus Publications, 2018.
- ČUNDERLÍK, R. – MIKULA, K. – MINARECHOVÁ, Z. – MACÁK, M. Computational Methods for High-Resolution Gravity Field Modeling. In GRAFAREND, E. *Encyclopedia of Geodesy*. Cham (Switzerland): Springer, 2018, ISBN 978-3-319-02370-0.
- DECKÝ, M. – MESIAR, R. – STUPŇANOVÁ, A. Aggregation Functions Based on Deviations. In *Information Processing and Management of Uncertainty in Knowledge-Based Systems. Theory and Foundations*. [s.l.]: Springer, 2018, s. 151–159. ISBN 978-3-319-91473-2.
- DE MIGUEL, L. – SESMA-SARA, M. – ROLDÁN, A. – LAFUENTE, J. – MESIAR, R. – BUSTINCE, H. Condiciones de monotonía direccional: interpretación geométrica. In HERRERA, F. *XVIII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2018)*. [s.l.]: Asociación Española para la Inteligencia Artificial, 2018, s. 387–392. ISBN 978-84-09-05643-9.
- DIBALA, M. – VAVRÍKOVÁ, L. – GENEST, C. On the size of the class of exchangeable bivariate extreme-value copulas with a given level of dependence. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 37. ISBN 978-80-8040-560-1.
- DIMURO, G. P. – MESIAR, R. – BUSTINCE, H. – BEDREGAL, B. R. C. – SANZ, J. A. – LUCCA, G. Penalty-Based Functions Defined by Pre-aggregation Functions. In *Information Processing and Management of Uncertainty in Knowledge-Based Systems. Theory and Foundations*. [s.l.]: Springer, 2018, s. 403–415. ISBN 978-3-319-91476-3.
- ĐURIGOVÁ, M. – BALLOVÁ, D. Changes in time series of runoff in Slovakia in recent decades. In KALICZ, P. – HLAVČOVÁ, K. – KOHNOVÁ, S. – RATTAYOVÁ, V. – GRIBOVŠZKI, Z. *HydroCarpath 2018. Catchment Processes in Regional Hydrology: Field Experiments and Modelling in Carpathians Basins*. Sopron: University of Sopron Press, 2018, s. 27. ISBN 978-963-334-199-5.
- FRANEK, M. – MACÁK, M. – HUBOVÁ, O. A CFD approach as preliminary study of the wind effects before the experiment. In *Proceedings of 26th SVSFEM ANSYS Users' Group Meeting and Conference 2018*. Brno: SVS FEM, 2018, s. 25–31. ISBN 978-80-905525-5-5.
- FRANEK, M. – MACÁK, M. – HUBOVÁ, O. Evaluation of the power spectral density function in BLWT in Bratislava. In CHMELÍK, V. – RYCHTÁRIKOVÁ, M. *ATF 2018*. Leuven: Katholieke Universiteit Leuven, 2018, s. 40–45. ISBN 978-909-031-441-9.
- FRANEK, M. – MACÁK, M. – HUBOVÁ, O. Numerical simulation of the external pressure on complex buildings. In PĚNČÍK, J. – PAVČEKOVÁ, M. *APABD 2018*. Brno: VUT – Brno University of Technology, 2018, s. 98–102. ISBN 978-80-7204-999-8.
- HALAŠ, R. – MESIAR, R. – PÓCS, J. Composition based generation of aggregation functions on real interval. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 46. ISBN 978-80-8040-560-1.

- HLINĚNÁ, D. – KALINA, M. – KRÁL, P. On orders and pre-orders generated from uninorms defined on  $[0, 1]^2$ . In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 48. ISBN 978-80-8040-560-1.
- HRIŇÁKOVÁ, K. Topologické indexy v teórii grafov a chémii. In *50. konferencia slovenských matematikov*. Žilina: EDIS, 2018, s. 33. ISBN 978-80-554-1500-0.
- HUBOVÁ, O. – MACÁK, M. Numerical and Experimental Investigation of Energy Potential of High-Rise Building Using IRWES System. In *WINERCOST '18*. Brusel: European Cooperation in Science and Technology, 2018, s. 99–106.
- HUBOVÁ, O. – MACÁK, M. Numerical and Experimental Investigation of Wind Flow in Urban Area. In FISCHER, C. – NÁPRSTEK, J. *Engineering mechanics 2018*. Prague: Institute of Theoretical and Applied Mechanics of the Czech Academy of Sciences, 2018, s. 317–320. ISBN 978-80-86246-88-8.
- JAJČAY, R. – ŠIRÁŇ, J. – WANG, Y. Regular and orientably-regular maps with quasiprimitive automorphism groups on vertices. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 26. ISBN 978-80-89829-05-7.
- JÁNOŠ, P. An upper bound on the order of Abelian lifts of complete and complete bipartite multigraphs of diameter two. In PERFILIEVA, I. *ISCAMI 2018*. Ostrava: University of Ostrava, 2018, s. 37. ISBN 978-80-7464-112-1.
- JÁNOŠ, P. Lifting complete bipartite multigraphs to graphs of diameter two. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2018, s. 20–26. ISBN 978-80-227-4864-3.
- JENČA, G. Tensor product of effect algebras as a Kan extension. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 56–57. ISBN 978-80-8040-560-1.
- KALICKÁ, J. – MINÁROVÁ, M. – HALVONIK, J. – MAJTÁNOVÁ, L. Statistical analysis of models' reliability for punching resistance assessment. In *Contemporary Computational Science*. Kraków: AGH University of Science and Technology Press, 2018, s. 79. ISBN 978-83-66016-22-4.
- KALINA, M. – MESIAR, R. – JIN, L. – ŠPIRKOVÁ, J. – BORKOTOKEY, S. Integral transformation of aggregation functions and Darsow product. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 150. ISBN 978-80-89829-05-7.
- KALINA, M. On pre-order generated by uninorms on bounded posets. In *Mathematical Modelling and Analysis*. Riga: University of Latvia, 2018, s. 32. ISBN 978-9934-19-517-4.
- KLEMENT, E P. – MESIAR, R. – STUPŇANOVÁ, A. Picture fuzzy sets and 3-fuzzy sets. In *Proceedings of the 2018 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*. [s.l.]: IEEE, 2018, s. 476–482. ISBN 978-1-5090-6020-7.
- KOLESÁROVÁ, A. – MESIAR, R. – SAMINGER-PLATZ, S. Generalized Farlie-Gumbel-Morgenstern Copulas. In *Information Processing and Management of Uncertainty in Knowledge-Based Systems. Theory and Foundations*. [s.l.]: Springer, 2018, s. 244–252. ISBN 978-3-319-91473-2.
- KOLLÁR, M. – ČUNDERLÍK, R. – MIKULA, K. Filtering models based on surface Laplacian and geodesic mean curvature flow for data on closed surfaces. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 121. ISBN 978-80-89829-05-7.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – KALICKÁ, J. Families of Perturbation Copulas Generalizing the FGM Family and Their Relations to Dependence Measures. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 53–63. ISBN 978-3-319-59305-0.
- KOMORNÍK, J. – KOMORNÍKOVÁ, M. – KALICKÁ, J. Generalization of the FGM family of copulas. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 62. ISBN 978-80-8040-560-1.
- KÓSA, B. – HALIČKOVÁ-BREHOVSKÁ, J. – MIKULA, K. Level set method for 3D point cloud surface reconstruction. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 122. ISBN 978-80-89829-05-7.
- KÓSA, B. – MIKULA, K. Surface reconstruction by using 3D point cloud and image information. In *Advances*

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

- in *Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2018, s. 27–31. ISBN 978-80-227-4864-3.
- KOUCHAKINEJAD, F. – KOLESÁROVÁ, A. – MESIAR, R. On  $k$ - $\square$ -additive Aggregation Functions. In TORRA, V. *Modeling Decisions for Artificial Intelligence*. Cham (Switzerland): Springer Nature, 2018, s. 27–34. ISBN 978-3-030-00201-5.
- KOUCHAKINEJAD, F. – ŠIPOŠOVÁ, A. Approximation of Super- and Sub-additive Transformations of Aggregation Functions. In *Proceedings of the 2018 6th Iranian Joint Congress on Fuzzy and Intelligent System (CFIS 2018)*. Piscataway (USA): Institute of Electrical and Electronics Engineers, 2018, s. 1–3. ISBN 978-1-5386-2836-2.
- MACÁK, M. – FRANEK, M. Numerical simulation of the atmospheric boundary layer. In *Proceedings of 26th SVSFEM ANSYS Users' Group Meeting and Conference 2018*. Brno: SVS FEM, 2018, s. 48–55. ISBN 978-80-905525-5-5.
- MARCO-DETCART, C. – FERNANDEZ, J. – BARRENECHEA, E. – MESIAR, R. – BUSTINCE, H. Ordered directionally monotone functions and the problem of edge detection. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 68–69. ISBN 978-80-8040-560-1.
- MEDVECKÁ, S. – IVÁNKOVÁ, O. – MACÁK, M. Súčiniteľ vonkajšieho tlaku budovy s atypickým pôdorysom. In *Spolehlivost konstrukcí 2018 & Modelování v mechanice 2018*. Ostrava: Vysoká škola báňská-Technická univerzita Ostrava Fakulta stavební, 2018, ISBN 978-80-248-4174-8.
- MESIAR, R. History and recent results in integration with respect to monotone measures. In *Mathematical Modelling and Analysis*. Riga: University of Latvia, 2018, s. 51. ISBN 978-9934-19-517-4.
- MESIAR, R. – KOLESÁROVÁ, A. Aggregation Functions in Fuzzy Set Theory: History and some Recent Advances. In *Proceedings of the 2018 6th Iranian Joint Congress on Fuzzy and Intelligent System (CFIS 2018)*. Piscataway (USA): Institute of Electrical and Electronics Engineers, 2018, s. 94–97. ISBN 978-1-5386-2836-2.
- MESIAR, R. – KOLESÁROVÁ, A.  $k$ -maxitivity of Order-Preserving Homomorphisms of Lattices. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 64–70. ISBN 978-3-319-59305-0.
- MESIAR, R. – KOLESÁROVÁ, A. On  $k$ -order pseudo-additive aggregation functions. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 70. ISBN 978-80-8040-560-1.
- MESIAR, R. – KOLESÁROVÁ, A. Pseudo-additive aggregation functions of order  $K$ . In *Mathematical Modelling and Analysis*. Riga: University of Latvia, 2018, s. 52. ISBN 978-9934-19-517-4.
- MESIAR, R. – KOUCHAKINEJAD, F. – MASHINCHI, M. Event Based Transformations of Bipolar Capacities. In *Proceedings of the 2018 6th Iranian Joint Congress on Fuzzy and Intelligent System (CFIS 2018)*. Piscataway (USA): Institute of Electrical and Electronics Engineers, 2018, s. 57–60. ISBN 978-1-5386-2836-2.
- MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. Preface. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 3. ISBN 978-80-8040-560-1.
- MESIAR, R. – STUPŇANOVÁ, A. Capacities, Survival Functions and Universal Integrals. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, s. 1–8. ISBN 978-3-319-59305-0.
- MIKULA, K. A computational reconstruction of zebrafish early embryogenesis by mathematical methods of image processing. In LÁVIČKA, M. – VELICHOVÁ, D. *Proceedings of the Czech-Slovak Conference on Geometry and Graphics 2018*. Bratislava: SCHK, 2018, s. 13. ISBN 978-80-8208-005-9.
- NÁNÁSIOVÁ, O. – VALÁŠKOVÁ, Ľ. – ČERŇANOVÁ, V. Probability measures and projections on quantum logics. In *Contemporary Computational Science*. Kraków: AGH University of Science and Technology Press, 2018, s. 78. ISBN 978-83-66016-22-4.
- OLEJNICZAK, P. – SAMULAK, E. – ŠIBÍKOVÁ, M. – BACIGÁL, T. – NECHAJ, J. – ŠIBÍK, J. – FRANKLIN, S. B. Clonal plant response to disturbance in the montane spruce forests of the Tatras (Slovakia). In *Natural*

- Ecosystems as Benchmarks for Vegetation Science*. [s.l.]: International Association for Vegetation Science (IAVS), 2018, s. 179.
- OUYANG, Y. – LI, J. – MESIAR, R. Decision Making Based on Optimal Measures under Intuitionistic Fuzzy Environment. In *Proceedings of the 2018 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*. [s.l.]: IEEE, 2018, s. 91–96. ISBN 978-1-5090-6020-7.
- PATERNAIN, D. – DE MIGUEL, L. – OCHOA, G. – LIZASOAIN, I. – BUSTINCE, H. – MESIAR, R. Una definición de la Integral de Choquet intervalo-valorada basada en permutaciones admisibles. In HERRERA, F. *XVIII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2018)*. [s.l.]: Asociación Española para la Inteligencia Artificial, 2018, s. 410–414. ISBN 978-84-09-05643-9.
- PATERNAIN, D. – JURIO, A. – RUIZ-ARANGUREN, J. – MINÁROVÁ, M. – TAKÁČ, Z. – BUSTINCE, H. Optimized Fuzzy Transform for Image Compression. In *Advances in Fuzzy Logic and Technology 2017 – Volume 3*. Cham (Switzerland): Springer, 2018, s. 118–128. ISBN 978-3-319-66827-7.
- PATERNAIN, D. – OCHOA, G. – LIZASOAIN, I. – BUSTINCE, H. – MESIAR, R. Interval aggregation using different admissible orders. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 79. ISBN 978-80-8040-560-1.
- POLYCARP, O. O. – UBA, M. O. – URBÁN, J. – MIKULA, K. – KRIVÁ, Z. Distance map registration. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 125. ISBN 978-80-89829-05-7.
- SESMA-SARA, M. – BUSTINCE, H. – BARRENECHEA, E. – LAFUENTE, J. – KOLESÁROVÁ, A. – MESIAR, R. Edge Detection Based on Ordered Directionally Monotone Functions. In *Advances in Fuzzy Logic and Technology 2017 – Volume 3*. Cham (Switzerland): Springer, 2018, s. 301–307. ISBN 978-3-319-66827-7.
- SESMA-SARA, M. – DE MIGUEL, L. – FERNANDEZ, J. – BARRENECHEA, E. – MESIAR, R. – BUSTINCE, H. Un algoritmo de comparación de imágenes basado en funciones de semejanza de matrices. In HERRERA, F. *XVIII Conferencia de la Asociación Española para la Inteligencia Artificial (CAEPIA 2018)*. [s.l.]: Asociación Española para la Inteligencia Artificial, 2018, s. 239–244. ISBN 978-84-09-05643-9.
- SESMA-SARA, M. – DE MIGUEL, L. – LAFUENTE, J. – BARRENECHEA, E. – MESIAR, R. – BUSTINCE, H. Strengthened Ordered Directional and Other Generalizations of Monotonicity for Aggregation Functions. In *Information Processing and Management of Uncertainty in Knowledge-Based Systems. Theory and Foundations*. [s.l.]: Springer, 2018, s. 416–426. ISBN 978-3-319-91476-3.
- SESMA-SARA, M. – DE MIGUEL, L. – MESIAR, R. – BUSTINCE, H. Matrix resemblance functions for image comparison. In *Proceedings of the 2018 IEEE International Conference on Fuzzy Systems (FUZZ-IEEE)*. [s.l.]: IEEE, 2018, s. 1378–1383. ISBN 978-1-5090-6020-7.
- SESMA-SARA, M. – LAFUENTE, J. – FERNANDEZ, J. – MESIAR, R. – BUSTINCE, H. From weakly monotone to strengthened ordered directionally monotone functions. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 87–88. ISBN 978-80-8040-560-1.
- SESMA-SARA, M. – MARCO-DETCART, C. – LAFUENTE, J. – ROLDÁN, A. – MESIAR, R. – BUSTINCE, H. Directions of directional, ordered directional and strengthened ordered directional increasingness of linear and ordered linear fusion operators. In SANDARAM, S. *Proceedings of the 2018 IEEE Symposium Series on Computational Intelligence (SSCI 2018)*. Piscataway (USA): IEEE, 2018, s. 434–440. ISBN 978-1-5386-9277-6.
- SMREK, P. On the decomposition approach to the Sugeno integral. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 91. ISBN 978-80-8040-560-1.
- STAŠOVÁ, O. – KRIVÁ, Z. Effect of convolutions on nonlinear tensor diffusion. In *50. konferencia slovenských matematikov*. Žilina: EDIS, 2018, s. 46. ISBN 978-80-554-1500-0.
- STUPŇANOVÁ, A. Aggregation based on penalties and on deviations. In *Mathematical Modelling and Analysis*. Riga: University of Latvia, 2018, s. 78. ISBN 978-9934-19-517-4.
- STUPŇANOVÁ, A. Symmetrization of aggregation functions. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 96.

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

ISBN 978-80-8040-560-1.

- ŠAGÁT, M. – REMEŠÍKOVÁ, M. A Lagrangian algorithm for finding approximate geodesics on polygonal surfaces. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 126. ISBN 978-80-89829-05-7.
- ŠAGÁT, M. – REMEŠÍKOVÁ, M. Implementation of approximate discrete Lagrangian algorithm for computing geodesics on smooth surfaces and on polygonal meshes for Rhinoceros. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2018, s. 32–37. ISBN 978-80-227-4864-3.
- ŠELIGA, A. A note on super-additive and sub-additive transformations. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 151. ISBN 978-80-89829-05-7.
- ŠELIGA, A. Decomposition integrals. In PERFILIEVA, I. *ISCAMI 2018*. Ostrava: University of Ostrava, 2018, s. 69. ISBN 978-80-7464-112-1.
- ŠELIGA, A. Interval-valued functions and decomposition integrals of Aumann type. In *Advances in Architectural, Civil and Environmental Engineering*. Bratislava: Spektrum STU, 2018, s. 38–42. ISBN 978-80-227-4864-3.
- ŠELIGA, A. New types of decomposition integrals and computational algorithms. In *Contemporary Computational Science*. Kraków: AGH University of Science and Technology Press, 2018, s. 93. ISBN 978-83-66016-22-4.
- ŠELIGA, A. Some notes on the decomposition integrals. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 85. ISBN 978-80-8040-560-1.
- ŠIPOŠOVÁ, A. – ŠIRÁŇ, J. Continuous functions with given super-additive and sub-additive transformations. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 152. ISBN 978-80-89829-05-7.
- ŠIRÁŇ, J. The degree-diameter problem in graphs: A confluence of algebra, geometry and combinatorics. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 18. ISBN 978-80-89829-05-7.
- ŠIRÁŇ, J. Transformations of Aggregation Functions: Local Versus Global Properties and Approximation. In *Proceedings of the 2018 6th Iranian Joint Congress on Fuzzy and Intelligent System (CFIS 2018)*. Piscataway (USA): Institute of Electrical and Electronics Engineers, 2018, s. 65–67. ISBN 978-1-5386-2836-2.
- TAKÁČ, Z. – MINÁROVÁ, M. – DE MIGUEL, L. – FERNANDEZ, J. – BUSTINCE, H. Interval-valued entropies and p-entropies. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 97–98. ISBN 978-80-8040-560-1.
- TEREŇOVÁ, Z. Lines on complete intersection of two quadrics in  $P^4$ . In SZARKOVÁ, D. – RICHTÁRIKOVÁ, D. – LETAVAJ, P. – GABKOVÁ, J. *Aplimat 2018*. Bratislava: Spektrum STU, 2018, s. 999–1006. ISBN 978-80-227-4765-3.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. Discrete duality finite volume scheme for the regularised Heston model. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 129–130. ISBN 978-80-89829-05-7.
- TORRA, V. – MESIAR, R. – DE BAETS, B. Preface. In TORRA, V. – DE BAETS, B. – MESIAR, R. *Aggregation Functions in Theory and in Practice*. Cham (Switzerland): Springer International Publishing AG, 2018, ISBN 978-3-319-59305-0.
- VAGASKÁ, A. – STUPŇANOVÁ, A. A note on moderate deviation function. In MESIAR, R. – SAMINGER-PLATZ, S. – STRUK, P. *FSTA 2018*. Liptovský Mikuláš: Armed Forces Academy of General M. R. Štefánik, 2018, s. 105. ISBN 978-80-8040-560-1.
- ŽDÍMALOVÁ, M. – BOHUMEL, T. – PLACHÁ-GREGOROVSKÁ, K. – WEISMANN, P. – EL FALOUGY, H. Graph cutting in image processing handling with biological data analysis. In *Contemporary Computational Science*. Kraków: AGH University of Science and Technology Press, 2018, s. 112. ISBN 978-83-66016-22-4.
- ŽDÍMALOVÁ, M. Graph Cutting in Image Processing and Its Applications. In BUŠA, J. – DOBOŠ, J. *19. Kon-*

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

*ferencia košických matematikov*. Košice: Prírodovedecká fakulta UPJŠ, 2018, s. 29. ISBN 978-80-553-2958-1.

ŽDÍMALOVÁ, M. – SOVA, O. – KOPÁNI, M. – MARUŠČÁKOVÁ, L. – BUCOVÁ, M. Mathematical modelling of bio-medical data. In KALINA, M. – STAŠOVÁ, O. – ŠELIGA, A. *CSASC 2018*. Bratislava: Jednota slovenských matematikov a fyzikov, 2018, s. 154–155. ISBN 978-80-89829-05-7.

## Závěrečná práce

- AMBROZ, M. – MIKULA, K. *Numerical modelling of the forest fire propagation*. Dizertačná práca. 2018.
- BACIGÁL, T. *Copula, construction and application*. Habilitačná práca. 2018.
- BACIGÁL, T. *Copula: Constructions and Application*. Habilitačná práca. 2018. 100 s.
- BARÁNKOVÁ, L. – TOMEK, L. *Modelovanie membránových konštrukcií pomocou MKP s kvadratickými elementami*. Bakalárska práca. 2018.
- BAŤKA, A. – URBÁN, J. *Parallel computing in image processing using GPU and CUDA architecture*. Diplomová práca. 2018.
- HRAPKOVÁ, L. – MIKULA, K. *Inflow-implicit/outflow-explicit metódy riešenia parciálnych diferenciálnych rovníc na nerovnomerných sieťach*. Diplomová práca. 2018.
- KALAFUT, J. – MESIAR, R. *Decomposition integrals*. Bakalárska práca. 2018.
- KLEINOVÁ, V. – FROLKOVIČ, P. *Optical flow and its application for image processing*. Dizertačná práca. 2018.
- KOLLÁR, M. – MIKULA, K. *Solving partial differential equations on surfaces with applications to geodetic data analysis*. Dizertačná práca. 2018.
- MEDĽA, M. – MIKULA, K. *Solving partial differential equations using finite volume method on non-uniform grids*. Dizertačná práca. 2018.
- MINÁROVÁ, M. *Rheology. Visco-Elastic and Visco-Elasto-Plastic Modelling*. Habilitačná práca. 2018.
- OPATOVSKÁ, M. – BALLOVÁ, D. *Komparatívna analýza vývoja záujmu o štúdium na technických univerzitách v SR a Česku*. Bakalárska práca. 2018.
- OŽVAT, A. A. – REMEŠÍKOVÁ, M. *Implementácia algoritmov pre tvorbu polygonálnych sietí v prostredí softvéru Rhinoceros*. Bakalárska práca. 2018.
- PALOŤOVÁ, M. – FROLKOVIČ, P. *Neurónové siete a numerické riešenie diferenciálnych rovníc*. Bakalárska práca. 2018.
- PAVLÍKOVÁ, S. *Spectral Properties of Graphs and their Applications*. Habilitačná práca. 2018.
- POLAKOVIČOVÁ, Z. – HANDLOVIČOVÁ, A. *Numerická schéma pre AMSS model v spracovaní obrazu*. Diplomová práca. 2018.
- SEKEREŠOVÁ, M. – HANDLOVIČOVÁ, A. *Numerické riešenie Helmholtzovej rovnice metódou konečných diferencií*. Bakalárska práca. 2018.
- SOMOROVSKÁ, M. – KOLLÁR, J. *Možnosti mail trackingu a možnosti ich implementácie*. Bakalárska práca. 2018.
- SOVA, O. – ŽDÍMALOVÁ, M. *Analýza biomedicínskych dát pomocou minimalizačných grafových algoritmov*. Diplomová práca. 2018.
- TIBENSKÝ, M. – HANDLOVIČOVÁ, A. *Využitie gradientných schém na numerické riešenie nelineárnych parabolických rovníc*. Dizertačná práca. 2018.
- TJEŠŠOVÁ, M. – SOKOL, M. *Mechanický model ľudskej chrbtice v MKP*. Dizertačná práca. 2018.
- UHRÍK, M. *Niektoré vlastnosti ortogonálnych polynómov jednej a viacerých premenných*. Habilitačná práca. 2018.
- ZATKALÍK, D. – ŽDÍMALOVÁ, M. *Spracovanie obrazu z pohľadu teórie grafov*. Bakalárska práca. 2018.
- ŽERAVÝ, M. – FROLKOVIČ, P. *Numerické riešenie rovníc plytkej vody pomocou softvéru Clawpack s cieľom modelovať lavíny*. Bakalárska práca. 2018.



## **Autorský index**

**Publikačná činnosť**

Členenie podľa druhu

Názov pracoviska: Katedra matematiky a deskriptívnej geometrie (SvF)

Obdobie: 2018

Vytlačené: 21. 12. 2020

© Akademický informačný systém STU