

<b>DEPARTMENT OF MATHEMATICS AND DESCRIPTIVE GEOMETRY</b>
---

Head of the Department:  
Prof. Jozef Širáň, DSc.

Tel: + 421 2 59274 703  
Fax: + 421 2 52961 477  
E-mail : [siran@lux.svf.stuba.sk](mailto:siran@lux.svf.stuba.sk)

## I. STAFF

### Professors

Mesiar Radko, DSc.	+421 2 59274 414	<a href="mailto:mesiar@vox.svf.stuba.sk">mesiar@vox.svf.stuba.sk</a>
Jozef Širáň, DSc.	+421 2 59274 315	<a href="mailto:siran@lux.sfv.stuba.sk">siran@lux.sfv.stuba.sk</a>

### Associate Professors

Martin Kalina, PhD.	+421 2 59274 405	<a href="mailto:kalina@vox.svf.stuba.sk">kalina@vox.svf.stuba.sk</a>
Knor Martin, PhD.	+421 2 59274 415	<a href="mailto:knor@vox.svf.stuba.sk">knor@vox.svf.stuba.sk</a>
Komorníková Magda, PhD.	+421 2 59274 428	<a href="mailto:magda@vox.svf.stuba.sk">magda@vox.svf.stuba.sk</a>
Krišťák Milan, PhD.	+421 2 59274 416	<a href="mailto:mikri@vox.svf.stuba.sk">mikri@vox.svf.stuba.sk</a>
Mikula Karol, PhD.	+421 2 59274 418	<a href="mailto:mikula@vox.svf.stuba.sk">mikula@vox.svf.stuba.sk</a>
Nánásiová Olga, PhD.	+421 2 59274 424	<a href="mailto:olga@vox.svf.stuba.sk">olga@vox.svf.stuba.sk</a>
Trokanová Katarína, PhD.	+421 2 59274 411	<a href="mailto:trokan@vox.svf.stuba.sk">trokan@vox.svf.stuba.sk</a>
Žembery Ivan, PhD.	+421 2 59274 424	<a href="mailto:zembery@vox.svf.stuba.sk">zembery@vox.svf.stuba.sk</a>

### Senior Lecturers

Bašová Hana	+421 2 59274 409	<a href="mailto:basova@vox.svf.stuba.sk">basova@vox.svf.stuba.sk</a>
Bystrický Róbert	+421 2 59274 407	<a href="mailto:rb@vox.svf.stuba.sk">rb@vox.svf.stuba.sk</a>
Čižmárová Božena	+421 2 59274 420	
Dallosová Agnesa	+421 2 59274 432	<a href="mailto:dallos@vox.svf.stuba.sk">dallos@vox.svf.stuba.sk</a>
Eisner Henrich	+421 2 59274 415	<a href="mailto:eisner@vox.svf.stuba.sk">eisner@vox.svf.stuba.sk</a>
Handlovičová Angela, PhD.	+421 2 59274 417	<a href="mailto:angela@vox.svf.stuba.sk">angela@vox.svf.stuba.sk</a>
Havranová Zuzana	+421 2 59274 408	<a href="mailto:zuzana@vox.svf.stuba.sk">zuzana@vox.svf.stuba.sk</a>
Kalická Jana	+421 2 59274 417	<a href="mailto:kalicka@vox.svf.stuba.sk">kalicka@vox.svf.stuba.sk</a>
Kollár Jozef	+421 2 59274 431	<a href="mailto:jmkollar@rex.svf.stuba.sk">jmkollar@rex.svf.stuba.sk</a>
Krivá Zuzana	+421 2 59274 339	<a href="mailto:kriva@vox.svf.stuba.sk">kriva@vox.svf.stuba.sk</a>
Kyselová Darina	+421 2 59274 408	<a href="mailto:kyselova@vox.svf.stuba.sk">kyselova@vox.svf.stuba.sk</a>
Mészárosová Katarína	+421 2 59274 432	<a href="mailto:katarina@vox.svf.stuba.sk">katarina@vox.svf.stuba.sk</a>
Mordelová Julyia	+421 2 59274 327	<a href="mailto:mordel@vox.svf.stuba.sk">mordel@vox.svf.stuba.sk</a>
Schiesslová Hana	+421 2 59274 409	<a href="mailto:hana@vox.svf.stuba.sk">hana@vox.svf.stuba.sk</a>
Smrek Peter	+421 2 59274 413	<a href="mailto:smrek@vox.svf.stuba.sk">smrek@vox.svf.stuba.sk</a>
Struk Peter	+421 2 59274 418	<a href="mailto:struk@vox.svf.stuba.sk">struk@vox.svf.stuba.sk</a>
Szökeová Danuša	+421 2 59274 430	<a href="mailto:szoke@vox.svf.stuba.sk">szoke@vox.svf.stuba.sk</a>
Šagiova Jana	+421 2 59274 404	<a href="mailto:siagiova@vox.svf.stuba.sk">siagiova@vox.svf.stuba.sk</a>
Václavíková Štefánia	+421 2 59274 404	<a href="mailto:stefi@vox.svf.stuba.sk">stefi@vox.svf.stuba.sk</a>
Vajsáblova Margita, PhD.	+421 2 59274 406	<a href="mailto:gitka@vox.svf.stuba.sk">gitka@vox.svf.stuba.sk</a>
Valášková Ľubica	+421 2 59274 339	<a href="mailto:luba@vox.svf.stuba.sk">luba@vox.svf.stuba.sk</a>
Viceník Peter	+421 2 59274 415	<a href="mailto:vicenik@vox.svf.stuba.sk">vicenik@vox.svf.stuba.sk</a>
Zaťková Viera	+421 2 59274 429	<a href="mailto:vzatko@vox.svf.stuba.sk">vzatko@vox.svf.stuba.sk</a>

### Doctoral Students

Bognár Tomáš	+421 2 59274 415	<a href="mailto:bognar@vox.svf.stuba.sk">bognar@vox.svf.stuba.sk</a>
Ipolyová Mária	+421 2 59274 404	<a href="mailto:ipolyi@vox.svf.stuba.sk">ipolyi@vox.svf.stuba.sk</a>
Rückschlossová Tatiana	+421 2 59274 327	<a href="mailto:tatiana@vox.svf.stuba.sk">tatiana@vox.svf.stuba.sk</a>

Líšková Ľubica	+421 2 59274 411	liskova@vox.svf.stuba.sk
<b>Technical Staff</b>		
Hribiková Ivana	+421 2 59274 404	hrib@ros.svf.stuba.sk
Javorská Jana	+421 2 59274 404	javorska@ros.svf.stuba.sk
Kollárová Marta (secretary)	+421 2 59274 703	kollarov@vox.svf.stuba.sk

## II. EQUIPMENT

### II.1 Teaching and Research Laboratories

Computer Laboratory

### II.2 Special Measuring Instruments and Computers

15 x PC 586, 10 x PC 486, 2 x PC 386

## III. TEACHING

### III.1 Graduate Study

Subject	Semester	Hours Per Week		Lecturer
		Lectures	Seminars	
Mathematics I	1	3	3	I. Žembery L. Mišík
Mathematics II	2	2	2	I. Žembery L. Mišík
Mathematics III	3	2	2	M. Krišťák K. Trokanová
Descriptive Geometry	1	2	2	A. Szittayová D. Kyselová
Descriptive Geometry	2	2	2	A. Szittayová D. Szökeová
Mathematics I	1	4	4	J. Širáň M. Kalina
Mathematics II	2	4	5	J. Širáň M. Kalina
Descriptive Geometry	1	2	2	V. Zaťková Ľ. Valášková
Mathematics I	1	3	3	M. Komorníková
Mathematics II	2	3	3	M. Komorníková
Mathematics III	3	3	3	A. Handlovičová
Descriptive Geometry	2	2	2	M. Vajsáblová
Descriptive Geometry	3	2	2	M. Vajsáblová
Mathematics	7	2	2	A. Handlovičová R. Mesiar
Applied Mathematics	7	2	1	A. Handlovičová O. Nánásiová

Mathematics	7	2 - 3	A.Handlovičová R. Mesiar
Mathematical Statistics	7	2 - 2	O. Nánásiová
Measurement and Data Processing Theory	7	2 - 2	O. Nánásiová
Engineering Geometry and AutoCAD		0 - 2	A. Bašová

### III.2 Postgraduate Study

Subject	Semester	Hours Per Semester	Lecturer
Numerical Methods I	1	52	M. Komorníková
Numerical Methods II	2	52	M. Komorníková
Mathematical Methods in Fluid Flow, Diffusion and Heat Transfer I	1	52	K. Mikula
Mathematical Methods in Fluid Flow, Diffusion and Heat Transfer II	2	52	K. Mikula
Mathematical Basis of the Finite Element Method I	1	52	K. Mikula
Mathematical Basis of the Finite Element Method II	2	52	K. Mikula
Mathematical Statistics	1	52	M. Krišťák
Stochastic Processes	1	52	M. Kalina
Stochastic Processes	2	52	M. Krišťák
Applied Statistics	1	52	O. Nánásiová
Uncertainty Modelling	2	52	R. Mesiar
Theory of Measure and Integral	1	52	R. Mesiar
Algebraic Theory of Graphs	1	52	J. Širáň
Probabilistic Modelling	2	52	J. Širáň
Proposed Experiment in Optimisation	1	52	M. Komorníková
Time Series Analysis in Civil Engineering	2	52	M. Komorníková

## IV. RESEARCH TARGETS

1. Fuzzy Sets - Theory and Applications
2. Numerical Analysis of Nonlinear Partial Differential Equations with Applications in:
  - Flow-in Porous Medium
  - Free Boundary Problems
  - Image Processing
3. Topological Graph Theory
4. Mathematica - Applications in Engineering and Economic Problems
5. Computer Graphics
6. Non-Standard Measure and Integral Theory
7. Aggregation Operators

## V. RESEARCH PROJECTS

1. Modern Mathematical Methods for Uncertainty Modelling and Their Application (2000 - 2002, Mesiar R.)
2. Modern Methods in Mathematics Education and Engineering Geometry (2000 - 2002, Komorníková M.)
3. CEEPUS SK - 42 "Fuzzy Control" (2001 - 2003, Mesiar R.)
4. Objectivisation and Optimisation of Some Civil Engineering Problems by Means of Quantitative Methods (1999-2001, Komorníková M.)
5. Robust and Efficient Computational Methods in Civil Engineering and Other Applied Sciences (1999 - 2002, Mikula K.)
6. Metric and Topological Properties of Oriented, Non-Oriented and Labelled Graphs (1999 – 2002, Širáň J.)
7. Fuzzy Sets and Their Applications (2001-2003, Mesiar R., in cooperation with Math. Inst. SAS)

## VI. COOPERATION

### VI.1 Cooperation in Slovakia

1. Faculty of Management, Comenius University, Bratislava
2. Faculty of Mathematics and Physics, Comenius University, Bratislava
3. Institute of Mathematics, Slovak Academy of Sciences, Bratislava
4. Military Academy, Liptovský Mikuláš
5. Faculty of Electrical Engineering and Informatics, SUT Bratislava
6. Technical University, Zvolen
7. Faculty of Management, University of Žilina
8. Welding Research Institute, Bratislava
9. GEOSAN s.r.o., Bratislava
10. Faculty of Chemical Engineering and Technology, SUT Bratislava

### VI.2 International cooperation

1. University of Linz, Austria
2. University of Novi Sad, Yugoslavia
3. University of Haifa, Israel
4. CTU Prague, Czech Republic
5. University of Ostrava, Czech Republic
6. University of Liberec, Czech Republic
7. WB University, Plzeň, Czech Republic
8. Czech Academy of Sciences, Czech Republic
9. University of Ghent, Belgium
10. TU Budapest, Hungary
11. University of Waterloo, Canada
12. University of Central Lancashire, Preston, U.K.
13. University of Freiburg, Germany
14. University of Bremen, Germany
15. University of Heidelberg, Germany

16. University of Vermont, Burlington, USA
17. University of California, Berkeley, USA
18. University of Newcastle, Australia
19. University of Bologna, Italy
20. CINECA – Supercomputing Centre, Bologna, Italy
21. University of Gröningen, the Netherlands
22. University of the Balearic Islands, Palma de Mallorca, Spain
23. University “La Sapienza”, Rome, Italy
24. Syracuse University, Syracuse, NY, USA
25. University of Dortmund, Germany
26. Weierstrass Institute for Applied Analysis and Stochastics, Berlin, Germany
27. Western Australia University, Perth, Australia
28. University of Auckland, New Zealand
29. University of Paris VI, France
30. TU Cracow, Poland
31. Pohang University of Science and Technology, South Korea
32. Western Washington University, Bellingham, USA
33. McMaster University, Hamilton, Canada

### VI.2.1 Visitors to the Department

1. Prof. ALDRED, New Zealand, July 2001
2. ALEXANDER TAKAČI, Austria, April 2001
3. BENEŠ, CTU Prague, Czech Republic, September 2001
4. Prof. BENVENUTI, University “La Sapienza”, Rome, Italy, September 2001
5. Ing. BOEVA, Bulgaria, January 2001
6. Prof. BONNINGTON, New Zealand, July 2001
7. Prof. CALVO, University of Palma de Mallorca, Spain, September 2001
8. Prof. CANDELORO, Italy, September 2001
9. Dr. DAŇKOVÁ, Austria, April and September 2001
10. DAVORKA RADAKOVIČ, Austria, April 2001
11. Ing. DVORÁK, Czech Republic, January 2001
12. Prof. GONZALES, Spain, September 2001
13. Prof. GRANNELL, Open University, England, July 2001
14. Prof. GRIGGS, Open University, England, July 2001
15. Mgr. HORČÍK, Czech Republic, September 2001
16. Ing. CHALUPECKÝ, Czech Republic, September 2001
17. JANA ŠTAJNER PAPUGA, Austria, April 2001
18. Prof. KERSNER, Hungary, November 2001
19. Prof. KORZHIK, Cernovtsy University, Ukraine, July 2001
20. Prof. KULCZYNSKI, Poland, September 2001
21. Prof. LAZAROV, Spain, September 2001
22. Prof. LIN, Australia, October 2001
23. Doc. LUKÁČOVÁ, Czech Republic, October 2001
24. Prof. MAREŠ, Czech Republic, September 2001
25. Ing. MIKIŠKA, Czech Republic, September 2001
26. Prof. MILLER, Australia, September 2001
27. Prof. MUEL, Spain, September 2001
28. Prof. NAVARA, CTU Prague, Czech Republic, September 2001
29. Prof. NOVÁK, Czech Republic, September 2001

30. Dr. PINA BARBIERI, Austria, April 2001
31. Prof. RAMEK, Australia, February 2001
32. Dr. RYAN, Australia, September 2001
33. Mgr. SAMINGER, Austria, April 2001
34. Prof. SIMANJUNTAK, Indonesia, September 2001
35. Prof. TUCKER, USA, July 2001
36. Prof. VIERTL, Austria, September 2001
37. Prof. VIVONA, Italy, September 2001
38. Prof. WATKINS, USA, July 2001

### **VI.2.2 Visits of Staff Members and Postgraduate Students to Foreign Institutions**

1. BYSTRICKÝ, R, Department of Mathematics, University of Montreal, Canada, 2001, 2 weeks
2. HANDLOVIČOVÁ, A., Department of Mathematics, University of Montreal, Canada, 2001, 2 weeks
3. IPOLYIOVÁ, M., University of Ostrava, Czech Republic, May – June, 2001 (CEEPUS, 1 month)
4. KALINA, M.
  - TU Dortmund (7<sup>th</sup> Fuzzy Days Conf.), Germany, 5 days
  - CTU Prague + University of Ostrava, Czech Republic, 1 month
5. KNOR, M, The Open University, England, May 2001 (London Mathematical Society), 1 month
6. KRIVÁ, Z.
  - Department of Applied Mathematics, University of Bonn, Germany, 2 weeks
  - CTU Prague, Czech Republic, 4 weeks
  - Department of Mathematics, University of Montreal, Canada, 2001, 2 weeks
7. MESIAR R.
  - PAN Warsaw, Poland, January 2001, 4 days
  - PAN Warsaw, Poland, May 2001, 4 days
  - TU Budapest, Hungary, June 2001, 4 days
  - Department of Mathematics, Johannes Kepler Universität, Linz, Austria, February 2001, 6 days
  - Department of Mathematics, Johannes Kepler Universität, Linz, Austria, November 2001, 1 month
  - University of Alcalá, Spain, March 2001, 1 month
  - University “La Sapienza”, Rome, Italy, May 2001, 1 month
  - TH Zittau, Germany, September 2001, 4 days
  - University of Oviedo, Spain, July 2001, 7 days

## 8. MIKULA K.

- Department of Mathematics, University of Bologna, Italy, 2001, 2 weeks
- Department of Mathematics, University of Montreal, Canada 2001, 2 weeks
- Institute of Applied Mathematics, University of Bonn, Germany 2001, 1 week
- Institute of Applied Mathematics, University of Freiburg, Germany, 2001, 1 week
- Department of Mathematics, Faculty of Nuclear and Physical Engineering, CTU Prague, Czech Republic, 2001, 1 week
- Weierstrass Institute for Applied Analysis and Stochastics, Berlin, Germany, 2000, 3 weeks

## 9. ŠIRÁŇ J.

- Western Washington University, Bellingham, U.S.A., April - June 2001, 3 months
- Florida Atlantic University, U.S.A., July 2001, 1 week

## 10. MORDELOVÁ, J., TU Krakow (CEEPUS), Poland, June 2001, 1 month

## 11. NÁNÁSIOVÁ, O., KM UP, Olomouc, Czech Republic

## 12. ŠIAGIOVÁ J.

- University of Ostrava (CEEPUS), Czech Republic, May-June 2000, 1 month
- University of Auckland, Auckland, New Zealand, May 2001
- University of Newcastle, Newcastle, Australia, April 2001

**VII. THESES****VII.1 Graduate Theses**

1. VAJSÁBLOVÁ, M., Territorial Model of Land, PhD., SvF STU, Bratislava, 2001

**VIII. OTHER ACTIVITIES****VIII.1 Special Lectures****i) In Slovak**

- [1] BAŠOVÁ H., MÉSZÁROSOVÁ K.: Surfaces that Occur in Engineering Practice. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [2] BYSTRICKÝ, R.: Non-Linear Approach to Computing Seismic Ground Vibrations. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [3] HANDLOVIČOVÁ, A.: Introduction to the Theory of Boundary Elements. PRASTAN 2001 Conference, Kočovce

- [4] IPOLYIOVÁ, M.: Tilings from a Different Perspective. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [5] KALINA, M.: Derivates and Uncertainty. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [6] KALINA, M.: Fuzzy Analysis of Real Functions. FPV UMB, Banská Bystrica, April 18, 2001.
- [7] KALINA, M.: An Elementary Introduction to Bootstrapping. PRASTAN 2001 Conference, Kočovce
- [8] KALINA, M.: Fuzzy Differentiation. Seminar on Non-Standard Mathematical Methods, Bratislava, March 21, 2001
- [9] KALINA, M.: Fuzzy Measures. Seminar on Non-Standard Mathematical Methods, Bratislava, December 5, 2001
- [10] KALINA, M.: Various Types in Independence on MV-Algebra. Seminar on D-posets in Quantum Structure Systems, Kaleník, October 19 – 21, 2001
- [11] KNOR, M.: Colouring of Cubic Graphs by Steiner Triple Systems II. Seminar on Graph Theory, MFF UK, November 2001.
- [12] KNOR, M.: Iterated Line Graphs. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [13] KNOR, M.: Iterated Line Graphs and Rotations. Seminar on Graph Theory, MFF UK, March 2001.
- [14] MESIAR, R.: Aggregation Operators. Seminar on Non-Standard Mathematical Methods, Bratislava, October 10, 2001
- [15] MESIAR, R.: K-states. Seminar on D-posets in Quantum Structure Systems, Kaleník, October 19 – 21, 2001
- [16] MORDELOVÁ, J.: 1-Lipschitz Operators. Seminar on Non-Standard Mathematical Methods, Bratislava, April 11, 2001
- [17] MORDELOVÁ, J.: Aggregation Operators on Finite Sets. Seminar on Non-Standard Mathematical Methods, Bratislava, November 7, 2001
- [18] NÁNÁSIOVÁ, O.: Abelian Extensions. Seminar on Quantum Logic, FEI STU Bratislava
- [19] NÁNÁSIOVÁ, O.: D-sets in a Plane. Seminar on D-posets in Quantum Structure Systems. Kaleník, October 19 – 21, 2001
- [20] NÁNÁSIOVÁ, O., KALICKÁ J.: Time Series. PRASTAN 2001 Conference, Kočovce
- [21] NÁNÁSIOVÁ, O.: Uncertainty Models. Seminar on Non-Standard Mathematical Methods, Bratislava, December 12, 2001
- [22] NÁNÁSIOVÁ, O.: Selected Problems in D-sets. Seminar on Non-Standard Mathematical Methods, Bratislava, April 25, 2001
- [23] NÁNÁSIOVÁ, O.: Conditional States. Research Seminar, Vyhne
- [24] NÁNÁSIOVÁ, O.: Examples of D-sets. Seminar on Quantum Logic, FEI STU
- [25] NÁNÁSIOVÁ, O.: Decomposition of D-sets. Seminar on Quantum Logic, FEI STU
- [26] NÁNÁSIOVÁ, O.: Fundamentals of D-sets. Seminar on Quantum Logic, FEI STU



- [27] RÜCKSCHLOSSOVÁ, T.: Invariant Aggregation Operators. Seminar on Non-Standard Mathematical Methods, Bratislava, November 14, 2001
- [28] RÜCKSCHLOSSOVÁ, T.: Invariant Operators. Seminar on Non-Standard Mathematical Methods, Bratislava, April 4, 2001
- [29] ŠIAGIOVÁ, J.: Algebraic Methods in the Study and Design of Communication Networks. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [30] ŠIRÁŇ, J.: Applications of Algebraic Topology in Chemistry. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [31] ŠIRÁŇ, J.: Connections Between Geometry. Group Theory, Complex Analysis and Graph Theory. Lecture at the JSMF Annual Meeting, March 2001
- [32] STANKOVIČOVÁ, I., NÁNÁSIOVÁ, O.: Teaching SAS. SAS Forum 2001, Users Conference, Smolenice
- [33] SZÖKEOVÁ, D.: Golden Ratio - Algebraic and Geometric Properties. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [34] SZÖKEOVÁ, D.: Golden Ratio in Geometry. 10<sup>th</sup> Seminar on Computer Geometry, Kočovce, September 2001
- [35] VAJSÁBLOVÁ, M.: A Geometrician's View of Mathematical Cartography. Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14-16, 2001
- [36] VICENÍK, P.: Additive Generators of t-norms. Seminar on Non-Standard Mathematical Methods, December 19, 2001, Bratislava
- [37] VICENÍK, P.: Pseudoinverse Functions to Monotonous Functions. Lechive at FPV UMB, Banská Bystrica, April 18, 2001.

## ii) In English

- [1] BENVENUTI, P., MESIAR, R.: Pseudo-Arithmetical Operations in the Integral Representation of Aggregation Operators. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [2] BYSTRICKÝ, R.: Nonlinear Approach in the Solution of the Seismic Response of a Foundation. SCAM 2001, Bratislava, April 2001
- [3] CALVO, T., MESIAR, R.: Stability of Aggregation Operators. EUSFLAT 2001, September 5 – 7, 2001, Leicester
- [4] CALVO, T., MESIAR, R.: Weighted Triangular Norm-Based Aggregation. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [5] IPOLYIOVÁ, M., ŠIAGIOVÁ, J.: Linear Representations of Triangle Groups and Congruence Subgroups. SCAM 2001, Bratislava, April 20-21, 2001
- [6] IPOLYIOVÁ, M., ŠIAGIOVÁ, J.: Regular Maps. Chebychev Polynomials and Minimal Polynomials of  $2 \cos(\pi / n)$ . Czech and Slovak Conference on Graph Theory and Combinatorics, Sedmihorky Spa, June 4-8, 2001

- [7] KALINA, M.: Fuzzy Limits and Fuzzy Nearness Relation. 7<sup>th</sup> Fuzzy Days in Dortmund
- [8] KALINA, M., NÁNÁSIOVÁ, O.: Conditional Pseudo-Additive Measures. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [9] KNOR, M.: Connectivity of Iterated Line and Path Graphs. GRAFY 2001, Sedmihorky, Czech Republic, June 2001.
- [10] KNOR, M.: Connectivity of Path Graphs and Embeddings on Surfaces. GEMS 2001 Conference, Bratislava, July 2001.
- [11] KNOR, M.: All Cubic Graphs are STS(381)-Colourable. Cycles and Colourings 2001, Stará Lesná, September 2001.
- [12] KNOR, M.: Iterated Line Graphs and Iterated Path Graphs. Open University, Milton Keynes, England, May 2001
- [13] KOLESÁROVÁ, A., MORDELOVÁ, J.: 1-Lipschitz and Kernel Aggregation Operators. International Summer School on Aggregation Operators - AGOP 2001, July 10 – 13, 2001, Oviedo
- [14] KOMORNÍKOVÁ, M., KOMORNÍK, J.: Modelling Common Trends in Geodesy. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [15] KOMORNÍKOVÁ, M., KOMORNÍK, J.: Models of Some Slovak Economic Time Series. 6<sup>th</sup> International Conference on Global Business and Economics, Bratislava, November 2001
- [16] KRIVÁ, Z.: Adaptive Finite Volume Schemes in the Processing of 3D Data Sets. SCAM 2001
- [17] MESIAR, R.: Integration with Respect to Fuzzy Measures. Dipartimento di Matematica e Informatica, Università di Udine, February 22, 2001, Udine
- [18] MESIAR, R.: k-order Additive Measure. Bratislava – Vienna Colloquium on Uncertainty Modelling, Technical University, Vienna, October 9, 2001
- [19] MESIAR, R.: Triangular Norms – What Are They and What Are They Good For. Seminar on Uncertainty Modelling, Systems Research Institute PAN, Warsaw, January, 2001
- [20] MESIAR, R.: Triangular Norms. Dipartimento di Matematica e Informatica, Università di Udine, Udine, February 22, 2001
- [21] MESIAR, R.: A Geometric Look at Integration. Perugia, May 15, 2001
- [22] MESIAR, R.: Aggregation Operators – Special Classes and Properties. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, April 3, 2001
- [23] MESIAR, R.: Aggregation Operators. International Summer School on Aggregation Operators - AGOP 2001, Oviedo, July 10 – 13, 2001
- [24] MESIAR, R., CALVO, T.: Weighted Triangular Norm-Based Aggregation Operators. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [25] MESIAR, R.: Fuzzy Measures and k-order Additivity. Master's and PhD. Seminar, Hagenberg, November 2001
- [26] MESIAR, R.: Fuzzy Measures. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, March 13, 2001
- [27] MESIAR, R., Fuzzy Quantities and Their Processing. FUZZY 2001, Zittau, September 17 – 19, 2001

- [28] MESIAR, R.: Generalized Möbius Transformation of Monotone Set Functions. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [29] MESIAR, R.: Geometric Look at Aggregation Operators. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, March 20, 2001
- [30] MESIAR, R.: Choquet Integrals. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, March 13, 2001
- [31] MESIAR, R.: Integral Based on Moebius Transformation. Università "La Sapienza", Rome, May 8, 2001
- [32] MESIAR, R.: Invariant Aggregation Operators. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, April 3, 2001
- [33] MESIAR, R., KLEMENT, E. P., PAP, E.: Geometric Approach to Aggregation. EUSFLAT 2001, September 5 – 7, 2001, Leicester
- [34] MESIAR, R., KLEMENT, E. P., PAP, E.: On Stable 2-copulas. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [35] MESIAR, R.: Maxitive and k-order Maxitive Measures. Workshop on Max-Plus Algebras, August 27-29, Prague, 2001
- [36] MESIAR, R.: Moebius Transform and Its Generalisations. Università "La Sapienza", Roma, May 8, 2001
- [37] MESIAR, R.: Operators Related to Triangular Norms. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, March 27, 2001
- [38] MESIAR, R.: Scale Invariant Operators. EUSFLAT'2001, September 5 – 7, 2001, Leicester
- [39] MESIAR, R.: Special Fuzzy Measures. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, March 20, 2001
- [40] MESIAR, R.: Triangular Norms. Seminars of Prof. Mesiar, Universidad de Alcalá, Madrid, March 27, 2001
- [41] MESIAR, R.: Triangular Norms: From Probabilistic Metrix Spaces to Multi-Valued Logic. Alfred Tarski Centenary Conference, Warsaw, May 28 – June 1, 2001
- [42] MIKULA, K.: Curvature Driven Models and Their Numerical Solution in Image Processing. Numerical Methods for Singular Free Boundary Problems and Hamilton-Jacobi Equations, ENUMATH 2001, Ischia
- [43] MIKULA, K.: Direct Method for Solution of Anisotropic Curve Evolution Equations with an External Driving Force. Seminar of Weierstrass Institute for Applied Analysis and Stochastics, Berlin 2001
- [44] MIKULA, K.: Image Processing With Partial Differential Equations. NATO-ASI Workshop on Modern Methods in Scientific Computing and Applications, Montreal 2001
- [45] MIKULA, K.: Image Processing With Partial Differential Equations. Seminar of Department of Numerical Mathematics, Charles University, Prague, Czech Republic 2001
- [46] MIKULA, K.: Image Processing With Partial Differential Equations. Seminar of Institute of Mathematical and Computational Modeling, Warsaw University, Warsaw, Poland 2001
- [47] MIKULA, K.: Methods for the Solution of Anisotropic Curve Evolution Equations. Seminar of Institute of Applied Mathematics, University of Freiburg, Germany 2001

- [48] MIKULA, K.: Methods for the Solution of Anisotropic Curve Evolution Equations. Seminar of Institute of Applied Mathematics, University of Bonn, Germany 2001
- [49] MORDELOVÁ, J., MUEL, E.: Binary Jointly Strictly Monotone Kernel Aggregation Operators on Finite Scales. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [50] MORDELOVÁ, J., MUEL, E.: Kernel Aggregation Operators. International Summer School on Aggregation Operators - AGOP 2001, Oviedo, July 10 – 13, 2001
- [51] NÁNÁSIOVÁ, O.: Principle Conditioning. IQSA Binomial Meeting, Cesena-Cesenatico, Italy, March 31- April 5, 2001
- [52] RÜCKSCHLOSSOVÁ, T.: Aggregation Operators: Definition and Properties. Department of Control Engineering of the Cracow University of Technology, June 28, 2001
- [53] RÜCKSCHLOSSOVÁ, T.: Invariant Aggregation Operators. SCAM 2001
- [54] RÜCKSCHLOSSOVÁ, T.: Invariant Subsets and Monotone Invariant Operators. International Conference on Uncertainty Modelling, Bratislava, September 2001
- [55] RÜCKSCHLOSSOVÁ, T., LÁZARO, J.: Shift Invariant Binary Aggregation Operators. International Summer School on Aggregation Operators - AGOP 2001, Oviedo, July 10 – 13, 2001
- [56] ŠIAGIOVÁ, J.: Algebraic Methods in the Study and Design of Communication Networks, University of Newcastle, Department of Software Engineering, Australia, April 19, 2001
- [57] ŠIAGIOVÁ, J.: Algebraic Methods in the Study and Design of Communication Networks, University of Newcastle, Department of Mathematics, Australia, April 24, 2001
- [58] ŠIAGIOVÁ, J.: Algebraic Methods in the Study and Design of Communication Networks, University of Auckland, New Zealand, May 1, 2001
- [59] ŠIAGIOVÁ, J.: Chebyshev Polynomials and Minimal Polynomials for  $2 \cos(\pi/n)$ , GEMS 2001 Conference, Bratislava, July 9-13, 2001
- [60] ŠIAGIOVÁ, J.: Minimum Diameter Lifts of Complete Graphs, University of Newcastle, Australia, April 6, 2001
- [61] ŠIRÁŇ, J.: Connections Between Complex Analysis, Group Theory, Geometry, and Graph Theory. Western Washington University, May 2001.
- [62] ŠIRÁŇ, J.: Regular Maps from Congruence Subgroups. PP, The Oberwolfach Workshop on Dessins d'Enfants, Germany, August 2001.
- [63] ŠIRÁŇ, J.: Security of Statistical Databases. PP, 5<sup>th</sup> World Multiconference on Informatics and Systemics, Orlando, USA, July 2001.
- [64] VICENÍK, P.: Some Constructions for Non-Continuous Additive Generators of Triangular Norms. International Conference on Uncertainty Modelling, Bratislava, September 2001

## IX. PUBLICATIONS

### IX.1 Journals

#### Other Scientific Papers in Slovakia:

- [1] IPOLYIOVÁ, M. - ŠIAGIOVÁ, J.: Linear Representations of Triangle Groups and Congruence Subgroups. *Journal of Electrical Engineering*, Vol. 52, No. 10/s (2001), 85 - 87
- [2] KALICKÁ, J.: Three Estimators of Covariance Function. *Journal of Electrical Engineering*, Vol. 52, No. 10/s, (2001) 45 - 47
- [3] KRIVÁ, Z. - MIKULA, K.: Adaptive Finite Volume Schemes in Processing 3D Data Sets, *Journal of Electrical Engineering*, Vol. 52, No. 10/s, (2001), 53 - 58
- [4] RÜCKSCHLOSSOVÁ, T.: Invariant Aggregation Operators. *Journal of Electrical Engineering*, Vol. 52, No. 10/s, (2001), 78 - 81

#### Other Scientific Papers Abroad (Journals):

- [1] HANDLOVIČOVÁ, A. - MIKULA, K. - SGALLARI, F.: Semi-Implicit Complementary Volume Scheme for Solving Level Set Like Equations in Image Processing and Curve Evolution, *Numerische Mathematik*, DOI 10.1007/s002110100374 (2001)

#### Scientific Papers Abroad in “Current Contents” Journals:

- [1] ARCHDEACON, D. - BONNINGTON, P. - ŠIRÁŇ, J.: Trading Crossings for Handles and Crosscaps. *J. Graph Theory* 38 (2001) 4, 230-243
- [2] BÄNSCH, E. - MIKULA, K.: Adaptivity in 3D Image Processing. *Computing and Visualization in Science* 4 (1) (2001) 21-30
- [3] CALVO, T. - MESIAR, R.: Criteria Importance in Median-Like Aggregation. *IEEE Transactions on Fuzzy Systems* 4, Vol. 9 (2001) 662 – 666
- [4] CALVO, T. - MESIAR, R.: Generalized Medians. *Fuzzy Sets and Systems* 124 (2001) 59 – 64
- [5] CALVO, T. - MESIAR, R.: Weighted Means Based on Triangular Conorms. *International J. Uncertain. Fuzziness Knowledge-Based Systems* 9 (2001) 183-196
- [6] HANDLOVIČOVÁ, A. - MIKULA, K. - SGALLARI, F.: Variational Numerical Methods for Solving Non-Linear Diffusion Equations Arising in Image Processing. *Journal for Visual Communication and Image Representation* 2001
- [7] KNOR, M. - NIEPEL, E.: Connectivity of Path Graphs. *Discussiones Mathematicae, Graph Theory* 20 (2000) 181-195
- [8] KNOR, M. - NIEPEL, E.: Diameter in Iterated Path Graphs. *Discrete Mathematics* 233 (2001) 151-161
- [9] KOMORNÍKOVÁ, M.: Aggregation Operators and Additive Generators. *International J. Uncertain. Fuzziness Knowledge-Based Systems*, Vol. 9, No. 2 (2001) 205 – 215

- [10] MARKO, V. - MESIAR, R.: Continuous Archimedean t-norms and Their Boundaries. Fuzzy Sets and Systems 121 (2001) 183-190
- [11] MESIAR, R.: A Note on Moderate Growth of t-conorms. Fuzzy Sets and Systems 122 (2001) 357-359
- [12] MIKULA, K. - N. RAMAROSY: Semi-Implicit Finite Volume Scheme for Solving Nonlinear Diffusion Equations in Image Processing. Numerische Mathematik 89 (3) (2001) 561-590
- [13] MIKULA, K. - ŠEVČOVIČ, D.: Evolution of Plane Curves Driven by a Non-Linear Function of Curvature and Anisotropy. SIAM Journal on Applied Mathematics, Vol. 61, No. 5 (2001) 1473-1501
- [14] MILLER, M. - ŠIRÁŇ, J.: Second-Degree Digraphs Which Miss the Moore Bound by Two. Discrete Mathematics 226 (2001) 269-280
- [15] ŠIAGIOVÁ, J.: A Note on the McKay-Miller-Širáň Graphs. Journal of Combinatorial Theory, Series B 81, 205-208 (2001)
- [16] ŠIRÁŇ, J.: Lifts of Graphs and Maps, Orthogonality, and Eigenvectors. J. Algebraic Combinatorics 14 (2001) 1, 57-72.
- [17] ŠIRÁŇ, J. - T. TUCKER - M. WATKINS: Realizing Finite Edge-Transitive Orientable Maps. J. Graph Theory 37 (2001) 1, 1-34
- [18] ŠIRÁŇ, J.: Triangle Group Representations and Constructions of Regular Maps, Proceedings of London Math. Soc. 82 (2001) No. 3, 513-532
- [19] ŠIRÁŇ, J.: Triangle Group Representations and Their Application to Graphs and Maps, Discrete Mathematics 229 (2001) 341-358.

#### **Contributions to Proceedings in Slovakia:**

- [1] BAŠOVÁ H. - MÉSZÁROSOVÁ K.: Surfaces That Occur in Engineering Practice. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [2] BOGNÁR, T.: Some Critical Remarks on the Forecasting of Enrollments with Fuzzy Time Series. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [3] BYSTRICKÝ R.: Nonlinear Approach in the Solution of the Seismic Response of a Foundation. Handbook of Abstracts, SCAM 2001, Bratislava, April 2001, p. 8
- [4] BYSTRICKÝ, R.: Nonlinear Approach to Computing Seismic Ground Vibrations. Handbook of Abstracts of the Conference on Mathematics, Geometry and their Applications - MAGIA 2001, Kočovce, 2001
- [5] BYSTRICKÝ, R.: Nonlinear Approaches in Computing the Seismic Vibrations of a Foundation. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [6] HANDLOVIČOVÁ, A.: Introduction to the Boundary Element Method. Proceedings of the PRASTAN 2001 Conference, pp. 39–41
- [7] HANDLOVIČOVÁ, A.: Second Order Partial Differential Equations and Their Practical Significance. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001

- [8] IPOLYIOVÁ M.: Tilings from a Different Perspective. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [9] IPOLYIOVÁ - M., ŠIAGIOVÁ, J.: Linear Representations of Triangle Groups and Congruence Subgroups. Handbook of Abstracts, SCAM 2001, Bratislava, April 2001, p. 14
- [10] KALICKÁ, J.: On Measurements in Simulation Estimates of Covariance Function. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [11] KALICKÁ, J. - NÁNÁSIOVÁ, O.: A Note on Time Series. Proceedings of the PRASTAN '2001 Conference, pp. 91 – 93
- [12] KALICKÁ, J.: Three Estimators of Covariance Function. Handbook of Abstracts, SCAM 2001, Bratislava, April 2001, p. 15
- [13] KALINA, M.: Derivates and Uncertainty. Handbook of Abstracts of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [14] KALINA, M.: Derivatives and the Relation of Nearness. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [15] KALINA, M.: An Elementary Introduction to Bootstrapping. PRASTAN 2001 Conference, Kočovce, pp. 94-95
- [16] KALINA, M.: Modelling Uncertainty at the Faculty of Civil Engineering. Slovak University of Technology. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [17] KNOR M.: Discrete Mathematics Research at the Faculty of Civil Engineering. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [18] KNOR, M.: Connectivity of Iterated Line and Path Graphs, GRAFY 2001, Sedmihorky, Czech Republic, June 2001.
- [19] KNOR, M.: Connectivity of Path Graphs and Embeddings on Surfaces, GEMS 2001 Conference, Bratislava, July 2001.
- [20] KNOR, M.: Iterated Line Graphs. Handbook of Abstracts of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001, p. 9
- [21] KNOR, M. - NIEPEL, E.: Iterated Line Graphs. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce 2001
- [22] KRIVÁ, Z. - MIKULA, K.: Adaptive Finite Volume Schemes in Processing 3D Data Sets, Handbook of Abstracts, SCAM 2001, Bratislava, April 2001, p. 17
- [23] NÁNÁSIOVÁ, O.: Quantum Logic, Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [24] RÜCKSCHLOSSOVÁ, T.: Invariant Aggregation Operators, Handbook of Abstracts, SCAM 2001, Bratislava, April 2001, p. 26
- [25] ŠIAGIOVÁ, J.: Algebraic Methods in the Study and Design of Communication Networks. Handbook of Abstracts of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001

- [26] ŠIAGIOVÁ, J.: An Application of Algebraic Methods in the Degree-Diameter Problem. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [27] STANKOVIČOVÁ, I., - NÁNÁSIOVÁ, O.: Teaching SAS. Proceedings of SAS Forum 2001, Users Conference, Smolenice, February 2001, CD
- [28] SZÖKEOVÁ, D.: Golden Ratio - Algebraic and Geometric Properties. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [29] SZÖKEOVÁ, D.: The Golden Ratio in Geometry. 10<sup>th</sup> Seminar on Computer Geometry, Kočovce, September 2001
- [30] VAJSÁBLOVÁ, M.: A Geometrician's View of Mathematics Cartography. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001
- [31] VALÁŠKOVÁ E.: A Note on 2<sup>nd</sup> order Additivity. Proceedings of the Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, 2001

#### **Contributions to Proceedings Abroad (all in English):**

- [1] BENVENUTI, P. - MESIAR, R.: Pseudo-Arithmetic Operations in the Integral Representation of Aggregation Operators. Proceedings of International Conference on Uncertainty Modelling, Bratislava, September 2001, 109 – 110
- [2] CALVO, T. - MESIAR, R.: Stability of Aggregation Operators. Proceedings of International Conference on Fuzzy Logic and Technology, Leicester, September 5 – 7, 2001, pp. 475 – 478
- [3] CALVO, T. - MESIAR, R.: Weighted Triangular Conorms. Abstracts of Linz 2001 Seminar, Linz, 2001, 23-26
- [4] CALVO, T. - MESIAR, R.: Weighted Means Based on Triangular Conorms and Uninorms. Proceedings of EUROFUSE 2001 Conference, Granada, April 25-27, 2001, pp. 55-60
- [5] ČUNDERLÍK, R. - MIKULA, K. - MOJZEŠ, M.: Numerical Solution of Neumann Geodetic Boundary Value Problem, Abstracts, Vistas for Geodesy in the New Millenium, IAG 2001 Scientific Assembly, Budapest 2001
- [6] IPOLYIOVÁ, M. - ŠIAGIOVÁ, J.: Regular Maps. Chebychev Polynomials and Minimal Polynomials of  $2 \cos(\pi/n)$ , Handbook of Abstracts, Czech-Slovak Conference on Graph Theory and Combinatorics '2001
- [7] KALINA, M.: Fuzzy Limits and Fuzzy Nearness Relation, in Proceedings of 7<sup>th</sup> Fuzzy Days in Dortmund, Springer LNCS 2206, Berlin, Heidelberg 2001, 755-761.
- [8] KALINA, M. - NÁNÁSIOVÁ, O.: Conditional Pseudo-Additive Measures on MV-Algebras, Proceedings of International Conference on Uncertainty Modelling, Bratislava, September 24–28, 2001, pp. 167-171.
- [9] KERRE, E. -E., MAREŠ - M., MESIAR, R.: Generated Fuzzy Quantities and Their Orderings. In: B. Bouchon-Meunier, R.R. Yager, L.A. Zadeh, eds., Information, Uncertainty and Fusion; Selected papers from IPMU '98, Paris; Kluwer Acad. Publ., Boston, 2000, 119-129



- [10] KLEMENT, E. P. - MESIAR, R. - PAP, E.: (S,U)-Integral Based Aggregation. Abstracts of Linz 2001 Seminar (eds. M. Roubens, E.P. Klement), Linz, 2001, 29-32
- [11] KLEMENT, E. P. - MESIAR, R. - PAP, E.: A Geometric Approach to Aggregation. Proceedings of the International Conference on Fuzzy Logic and Technology, Leicester, September 5–7, 2001, pp. 466 – 469
- [12] KOLESÁROVÁ, A. - MORDELOVÁ, J.: 1-Lipschitz and Kernel Aggregation Operators. Proceedings of AGOP 2001, July 10-13, 2001, Oviedo, Spain, 71 – 76
- [13] KOMORNÍKOVÁ, M. - KOMORNÍK, J.: Modelling Common Trends in Geodesy. Proceedings of the International Conference on Uncertainty Modelling, September 24–28, 2001 Bratislava, pp. 142 – 146
- [14] KOMORNÍKOVÁ, M. - KOMORNÍK, J.: Models of Some Slovak Economic Time Series, Proceedings of 6<sup>th</sup> International Conference on Global Business and Economics, Bratislava, November 2001 (CD)
- [15] LÁZARO, J. - RÜCKSCHLOSSOVÁ, T.: Shift Invariant Binary Aggregation Operators. Proceedings of AGOP 2001, July 10-13, 2001, Oviedo, Spain, 77 - 80
- [16] MESIAR, R.: Scale Invariant Operators. Proceedings of International Conference on Fuzzy Logic and Technology, Leicester, September 5– 7, 2001, pp. 479 - 481
- [17] MESIAR, R.: Aggregation Operators. Proceedings of AGOP 2001, July 10-13, 2001, Oviedo, Spain, 43 - 44
- [18] MESIAR, R. - CALVO, T.: Weighted Triangular Norm-Based Aggregation Operators. Proceedings of the International Conference on Uncertainty Modelling, Bratislava, September 2001, 53 – 61
- [19] MESIAR, R.: Fuzzy Measures and k-order Additivity. Abstracts of the FLLL/SCCH Master and PhD Seminar, November 15, 2001
- [20] MESIAR, R.: Fuzzy Quantities and Their Processing. Proceedings of 9<sup>th</sup> Zittau Colloquium 2001, September 17 – 19, 2001, 55 – 60
- [21] MESIAR, R.: Generalized Möbius Transformation of Monotone Set Functions. Proceedings of International Conference on Uncertainty Modelling, Bratislava, September 2001, 183 – 195
- [22] MESIAR, R. – KLEMENT, E. P. - PAP, E.: On Stable 2-Copulas. Proceedings of the International Conference on Uncertainty Modelling, Bratislava, September 2001, 122 – 126
- [23] MESIAR, R.: Maxitive and k-Order Maxitive Measures. Proceedings of Workshop on Max-Plus Algebras, 27-29 August, Prague, 2001, 117-121
- [24] MESIAR, R.: Triangular Norms: From Probabilistic Metric Spaces to Multi-Valued Logic. Proceedings of Alfred Tarski Centenary Conference, Warsaw, 28 May – 1 June 2001, p. 35
- [25] MIKULA, K.: Curvature Driven Models and Their Numerical Solution in Image Processing, Abstracts ENUMATH 2001, European Conference on Numerical Mathematics and Advanced Applications, Ischia Porto, Italy 2001
- [26] MIKULA, K.: Image Processing with Partial Differential Equations. Synopsis des Cours et References (Abstracts), Higher Mathematics Seminar on Modern Methods in Scientific Computing and Applications, NATO Advanced Study Institute, Montreal, Canada 2001

- [27] MIKULA, K. - MORIGI, S. - SGALLARI, F.: Registration Based on Evolution Models, Advanced Signal Algorithms, Architecture and Implementations XI (Ed. F.T. Luk), Proceedings of the Society of Photo-Optical Instrumentation Engineers (SPIE), Vol. 4474, The International Society for Optical Engineering, Bellingham, WA 2001
- [28] MIKULA, K.: Parallel Filtering of Three Dimensional Image Sequences, Daedalus, News from the MINOS Project, No. 2 (2001) pp. 6-7
- [29] MIKULA, K. - ŠEVČOVIČ, D.: A Direct Method for Solving an Anisotropic Mean Curvature Flow of a Planar Curve with an External Force. Abstracts of Equadiff 2001, Prague 2001
- [30] MORDELOVÁ, J. - MUEL, E.: Binary Jointly Strictly Monotone Kernel Aggregation Operators on Finite Scales. Proceedings of the International Conference on Uncertainty Modelling, Bratislava, September 2001, 127 – 131
- [31] MORDELOVÁ, J. - MUEL, E.: Kernel Aggregation Operators. Proceedings of AGOP 2001, July 10-13, 2001, Oviedo, Spain, 95 - 98
- [32] NÁNÁSIOVÁ O.: Principle Conditioning. IQSA Biannual meeting, March 31- April 5, 2001, Cesena-Cesenatico, Italy
- [33] RÜCKSCHLOSSOVÁ, T.: Invariant Subsets and Monotone Invariant Operators. Proceedings of International Conference on Uncertainty Modelling, Bratislava, September 2001, 138 - 141
- [34] ŠIAGIOVÁ, J.: Chebyshev Polynomials and Minimal Polynomials for  $2 \cos(\pi/n)$ , GEMS 2001 Conference, Bratislava, July 9-13, 2001
- [35] ŠIAGIOVÁ, J.: Chebyshev Polynomials and Minimal Polynomials for  $2 \cos(\pi/n)$ , Handbook of GEMS 2001 Conference
- [36] ŠIRÁŇ, J.: Security of Statistical Databases. Proceedings of 5<sup>th</sup> World Multiconference on Systemics, Cybernetics and Informatics, International Institute of Informatics and Systemics, Vol XIV, (2001) Part II, 519-524.
- [37] VICENÍK, P.: Some Constructions for Non-Continuous Additive Generators of Triangular Norms. Proceedings of the International Conference on Uncertainty Modelling, Bratislava, September 2001, 62 - 66

## IX.2 Books and Textbooks

### a) Scientific books and chapters in scientific books

- [1] CALVO, T. - KOLESÁROVÁ, A. - KOMORNÍKOVÁ, M. - MESIAR, R.: A Review of Aggregation Operators. University of Alcalá, Alcalá de Henares, Madrid 2001
- [2] ŠIRÁŇ, J.: Regular Maps. Com2MaC Lecture Note Series No. 2, Pohang, Korea, 2001
- [3] MESIAR, R.: Triangular Norms - An Overview. In: B.Reusch, K.-H.Temme, eds., Computational Intelligence in Theory and Practice; Physica Verlag, Heidelberg, 2001, 35-54.
- [4] MIKULA, K.: Solution and Applications of the Curvature Driven Evolution of Curves and Surfaces in Numerical Methods for Viscosity Solutions and Applications (eds. M. Falcone, Ch. Makridakis), Series on Advances in Mathematics for Applied Sciences, Vol. 59, World Scientific, Singapore (2001) 173-196

**b) Tutorial Textbooks (all in Slovak)**

- [1] KNOR, M. - KOLLÁR, J.: Mathematics for Architects, Faculty of Civil Engineering, Bratislava, 2001
- [2] SZÖKEOVÁ D.: Descriptive Geometry I., Parallel Projection. STU Bratislava, 2001
- [3] ŠIRÁŇ, J. et al.: Handbook for Entrance Examinations in Mathematics at STU Bratislava, STU Bratislava, 2001

**IX.3 Conferences**

- [1] International Conference on 40<sup>th</sup> Seminar on Higher Mathematics (NATO Advanced Study Institute) on Modern Methods in Scientific Computing and Applications, Montreal, Canada, July 9-20, 2001
- [2] International Conference on Uncertainty Modelling, September 2001, Bratislava
- [3] International Conference on Graph Embedding and Maps on Surfaces, Bratislava, July 9 – 13, 2001
- [4] Conference on Probability, Statistics and Numerics - PRASTAN 2001, Kočovce, June 2001
- [5] Conference on Mathematics, Geometry and Their Applications - MAGIA 2001, Kočovce, September 14- 16, 2001
- [6] JSMF Seminar on Non-Standard Mathematical Methods
- [7] Invited Session on Aggregation Operators as part of EUSFLAT Conference, Leicester, September 5– 7, 2001
- [8] International Conference on Applied Mathematics for Undergraduate and Graduate Students SCAM 2000, Bratislava, April 2000