Curriculum vitae

MIRKO NAVARA

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Born 11th April, 1959 in Ledeč nad Sázavou, Czechoslovakia (now Czech Republic)

WORK EXPERIENCE

- Czech Technical University, Dept. of Cybernetics, Center for Machine Perception, Full Professor: Responsibilities include: Research in nonstandard logics and applied mathematics, lectures in Fuzzy Logic, Numerical Analysis, Probability and Statistics. September 2007, through present.
- Czech Technical University, Dept. of Cybernetics, Center for Machine Perception, Researcher: Responsibilities include: Research in nonstandard logics and applied mathematics, lectures in Fuzzy Logic, Numerical Analysis and Computer Algebra Systems. August 1996, through August 2007.
- Czech Technical University, Dept. of Mathematics, Assistant Professor: Responsibilities included: Lectures in Numerical Analysis and Computer Algebra Systems, seminars in Linear Algebra, and Mathematical Analysis, preparation and supervision of laboratories on PCs and Apple Macintosh computers, preparation of educational computer programs. September 1987, through July 1996.
- Czech Technical University, Dept. of Mathematics, Postgraduate Student: Responsibilities included: Seminars in Linear Algebra, Mathematical Analysis and Theory of Probability. September 1983, through August 1987.

EDUCATION

- **Full Professor** in Applied Mathematics, Department of Cybernetics, Faculty of Electrical Engineering, Czech Technical University, October 2005.
- **Doctor of Science** in Mathematical Logic, Academy of Sciences of the Czech Republic, February 2001.
- **Docent** (~ Associate Professor) in Applied Mathematics, Department of Mathematics, Faculty of Electrical Engineering, Czech Technical University, October 1996.
- Candidate of Science (~ PhD) in Mathematical Analysis, Department of Mathematics, Faculty of Electrical Engineering, Czech Technical University, April 1988.
- **Diploma Engineer in Technical Cybernetics** (specialization Control Engineering), Department of Control Engineering, Faculty of Electrical Engineering, Czech Technical University, July 1983.

RESEARCH

Recent interest: Alternative models of probability based on quantum and fuzzy logics—algebraic and measure-theoretic aspects. Recipient of the grants:

- PECO 3510PL922147 (European Community) "Quantum Logics and Orthomodular Lattices" (1993)
- Aktion Österreich–Tschechien 16p12 "Intelligent Technologies in Signal Processing and Quality Control" (1997/98)
- Czech Science Foundation no. 201/97/0437 "Mathematical Models of Uncertainty" (1997–99)
- Aktion Österreich–Tschechien 23p16 "Theory and Applications of Fuzzy Control" (1999)
- Czech Science Foundation no. 201/02/1540 "Many-valued logics for soft-computing" (2002–04)
- Czech Science Foundation 201/07/1136 "Mathematics of Uncertainty" (2007–09)
- Czech Science Foundation 20-09869L "The many facets of orthomodularity" (2020-22)

Supervisor of the following successful PhD. students: Miroslav Svítek (co-supervisor specialist) 1996 Pavel Mrázek 2001 Rostislav Horčík 2005 Daniel Martinec 2008 Milan Petrík 2009 Jeanine Gabriëls 2016

SELECTED PROFESSIONAL VISITS ABROAD

1989 Switzerland, University of Berne (2 weeks) 1993 France, University of Lyon I (3 months, EC grant PECO) 1995 Austria, Johannes Kepler University Linz (1 month, scholarship Aktion Osterreich–Tschechische Republik) 1996 Italy, University "Federico II", Napoli (1 month) 1996 Israel, University of Haifa (1 week) 1997 Slovakia, Slovak Technical University, Bratislava (1 month) 1997 USA, New Mexico State Univ., Las Cruces (2 weeks) 1998 Austria, Johannes Kepler University Linz (3 weeks) 1999 USA, New Mexico State Univ., Las Cruces (2 weeks) 1999 France, University of Lyon I (1 month) 2000 Slovakia, Slovak Technical University, Bratislava (1 month) 2003 Austria, Johannes Kepler University Linz (1 month) 2003 Slovakia, Slovak Technical University, Bratislava (1 month) 2003 Italy, University of Salerno (1 month) 2004 Austria, Johannes Kepler University Linz (1 month) 2004 Germany, Technical University of Dortmund (2 weeks)

SELECTED PUBLICATIONS

Over 200 journal and conference papers, including

- Harding, J., Navara, M.: Subalgebras of orthomodular lattices. Order 28 (2011), no. 3, 549–563. DOI: 10.1007/s11083-010-9191-z
- Navara, M.: Convex combinations of fuzzy logical operations. Fuzzy Sets Syst. 264 (2015), 51-63. DOI 10.1016/j.fss.2014.10.013
- Navara, M.: Formulas for generators of R-implications. Fuzzy Sets Syst. 359 (2019), 80-89. DOI 10.1016/j.fss.2018.09.011
- Navara, M., Šindelář, J.: Imperfect information as a source of non-symmetry in the two envelope problem. *International Journal of Approximate Rea*soning **112** (2019), 37–54. DOI 10.1016/j.ijar.2019.05.011

Harding, J., Heunen, Ch., Lindenhovius, B., Navara, M.: Boolean subalgebras

of ortho
algebras. Order **36** (2019), 563–609. DOI 10.1007/s11083-019-09483-6

Navara, M., Petrík, M.: Generators of fuzzy logical operations. In: H.T. Nguyen, V. Kreinovich (eds.), Algebraic Techniques and Their Use in Describing and Processing Uncertainty, Studies in Computational Intelligence 878, Springer, 89–112, 2020. DOI 10.1007/978-3-030-38565-1_8

Citations (WoS without self-citations): ¿1000 h-index (WoS): 15 Erdös number: 2

AWARDS

"Prize for Scientific Achievement", awarded by the International Quantum Structures Association, 1996, "Award for an Excellent Research Achievement" from the Rector of the Czech Technical University in Prague, 2004.

ACTIVITIES

Member of the Editorial Boards of Soft Computing, 2009-2021 Fuzzy Sets and Systems, since 2012 Mathematica Slovaca, since 2012 Tatra Mountains Mathematical Publications, since 1998

International Quantum Structures Association, 1991 (President 2006–08, Vice President 2008–10 and 2018–21) Association of Czech Mathematicians and Physicists, since 1988 European Society for Fuzzy Logic and Technology, since 1998 Czech Society for Cybernetics and Informatics, since 1999 (member of the Committee 2003–08) Sisyfos (Czech Sceptics Club), since 1998

LANGUAGES

English fluent, Russian fluent, French fair, Italian fair, German passive.

Praha, April 22, 2022