

# Lista de lucrări

## Prof.univ.dr. Sorin NĂDĂBAN

### A) Teza de doctorat

„Teorie spectrală pe spații Hilbert factor”, susținută în anul 2000 la Universitatea de Vest din Timișoara, sub coordonarea domnului profesor Dumitru Gașpar.

### B) Brevete de invenție

### C) Cărți

#### a) Apărute în edituri recunoscute CNCS

1. **S. Nădăban**, *Matematici aplicate în economie*, Editia a II-a, Editura Mirton, Timișoara, 2012, 180 pag., ISBN: 978-973-52-1275-9.
2. **S. Nădăban**, *Calculus- Elemente de calcul diferențial și integral*, Editura Mirton, Timișoara, 2010, 133 pag., ISBN: 978-973-52-0931-5.
3. **S. Nădăban**, *Matematici aplicate în economie*, Editura Mirton, Timișoara, 2010, 200 pag., ISBN: 978-973-52-0917-9.
4. **S. Nădăban**, *MathEco-exerciții și probleme*, Editia a II-a, Editura Mirton, Timișoara, 2008, 207 pag., ISBN: 978-973-52-0466-2.
5. **S. Nădăban**, A. Șandru, *Algoritmica grafurilor – Sinteze de curs și aplicații*, Editura Mirton, Timișoara, 2007, 265 pag., ISBN: 978-973-52-0249-1.
6. **S. Nădăban**, *MathEco-exerciții și probleme*, Editura Mirton, Timișoara, 2007, 183 pag., ISBN: 978-973-52-0219-4.
7. **S. Nădăban**, *Teoria Probabilităților și Statistică Matematică*, Editura Didactică și Pedagogică, București, 2007, 338 pag., ISBN: 978-973-30-1743-1.
8. **S. Nădăban**, *MathEco-Analiză Matematică*, Ediția a 2-a, Editura Mirton, Timișoara, 2004, 290 p., ISBN: 973-661-492-1.
9. **S. Nădăban**, *MathEco-Analiză Matematică*, Editura Mirton, Timișoara, 2001, 290 pag., ISBN: 973-585-421-X.
10. **S. Nădăban**, *Spectral Theory on Quotient Spaces*, Editura Universității de Vest din Timișoara, Colecția Monografii Matematice, Vol 73, 2001, 148 pag.

#### b) Coordonarea unor volume colective publicate în edituri recunoscute CNCS

1. **S. Nădăban**, A. Palcu, C. Stoica, M. Tomescu, *Proceedings of the International Symposium „Research and Education in an Innovation Era” – Sections: Mathematics & Computer Science*, 5th Edition, Arad 05-07 November 2014, Editura Universității „Aurel Vlaicu”, Arad, 95 pag., ISSN 2065 2569.
2. **S. Nădăban**, A. Palcu, C. Stoica, M. Tomescu, *Proceedings of the International Symposium „Research and Education in an Innovation Era” – Sections: Mathematics and Computer Science*, Fourth Edition, Arad 8-9 November 2012, Editura Universității „Aurel Vlaicu”, Arad, 125 pag., ISSN 2065 2569.
3. **S. Nădăban**, C. Stoica, *Concursul de Matematică „Caius Iacob”*, Editura Universității „Aurel Vlaicu”, Arad, 2010, 83 pag., ISBN 978-973-752-461-4.
4. **S. Nădăban**, M.L. Tomescu, *Proceedings of the International Symposium „Research and Education in an Innovation Era” – Sections: Computer Science, Mathematics, Didactics*, Third Edition, Arad 11-12 November 2010, Editura Universității „Aurel Vlaicu”, Arad, 249 pag., ISSN 2065 2569.
5. **S. Nădăban**, C. Stoica, *Proceedings of the International Symposium „Research and Education in an Innovation Era” - Section Mathematics and Computer Science*, Second Edition, Arad 20-21 November 2008, Editura Universității „Aurel Vlaicu”, Arad, 244 pag., ISSN 2065 2569.
6. **S. Nădăban**, C. Stoica, *Proceedings of the International Symposium „Research and Education in an Innovation Era” - Section Mathematics and Computer Science*, Arad 16-18 November 2006, Editura Mirton, Timișoara, 254 pag., ISBN 978-973-52-0108-1.

### c) Capitole în cărți

## D) Articole în extenso, publicate în reviste din fluxul științific internațional principal

### I. Articole științifice publicate în reviste de specialitate cotate ISI

1. **S. Nădăban**, *Some fundamental properties of fuzzy linear relations between vector spaces*, Filomat, **30(1)** (2016), 41-53.
2. **S. Nădăban**, *Fuzzy b-metric spaces*, International Journal of Computers Communications & Control, **11(2)** (2016), 273-281.
3. **S. Nădăban**, I. Dzitac, *Some properties and applications of fuzzy quasi-pseudo-metric spaces*, Informatica, **27 (1)** (2016), 141-159.
4. **S. Nădăban**, *Fuzzy pseudo-norms and fuzzy F-spaces*, Fuzzy Sets and Systems, **282** (2016), 99–114.
5. T. Bînzar, F. Pater, **S. Nădăban**, *On fuzzy normed algebras*, Journal of Nonlinear Sciences & Applications (JNSA), **9(9)** (2016), 5488-5496. IF: 1,34
6. **S. Nădăban**, *Fuzzy continuous mappings in fuzzy normed linear spaces*, International Journal of Computers Communications & Control, **10 (6)** (2015), 834-842.
7. **S. Nădăban**, *Fuzzy euclidean normed spaces for data mining applications*, International Journal of Computers Communications & Control, **10 (1)** (2015), 70-77.
8. **S. Nădăban**, I. Dzitac, *Atomic decompositions of fuzzy normed linear spaces for wavelet applications*, Informatica, **25** (2014), 643-662.
9. A. Palcu, **S. Nădăban**, A. Șandru, *Some on the Boson Mass Spectrum in a 3-3-1 Gauge Model*, Romanian Journal of Physics, **56** (2011), 673-681.

### II. ISI Proceedings

1. A. Szabo, T. Bînzar, **S. Nădăban**, F. Pater, *Some properties of fuzzy bounded sets in fuzzy normed linear spaces*, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2017), Book Series: AIP Conference Proceedings, Volume 1978, Article Number: UNSP 390009-1. DOI: 10.1063/1.5043993
2. A. Szabo, T. Bînzar, **S. Nădăban**, F. Pater, *Strict inclusions between some classes of fuzzy relations*, Proceedings of the International Conference on Numerical Analysis and Applied Mathematics 2016 (ICNAAM-2016), Book Series: AIP Conference Proceedings, Volume 1863, Article Number: UNSP 430007-1. DOI: 10.1063/1.4992603.
3. **S. Nădăban**, S. Dzitac, I. Dzitac, *Fuzzy TOPSIS: A general view*, Promoting Business Analytics and Quantitative Management of Technology: 4th International Conference on Information Technology and Quantitative Management (ITQM 2014), Procedia Computer Science, **91** (2016), 823-831. DOIȘ 10.1016/j.procs.2016.07088
4. **S. Nădăban**, S. Dzitac, *Neutrosophic TOPSIS: A general view*, 6th International Conference on Computer Communications and Control (ICCCC), IEEE Xplore **2016**, 250-253.
5. **S. Nădăban**, I. Dzitac, *Special Types of Fuzzy Relations*, Information Technology and Quantitative Management (ITQM 2014), Procedia Computer Science, **31C** (2014), 552-557.

### III. Articole științifice publicate în reviste de specialitate indexate în baze de date internaționale

1. L. Popa, L. Sida, **S. Nădăban**, *Matrix Representations of Fuzzy Quaternion Numbers*, Theory and Applications of Mathematics & Computer Science, **1(1)(2017)**, 59-71.
2. **S. Nădăban**, T. Bînzar, F. Pater, C. Țerei, S. Hoară, *Katsaras's type fuzzy norm under triangular norms*, Theory and Applications of Mathematics & Computer Science, **5(2) (2015)**, 148–157.
3. P. Gașpar, **S. Nădăban**, L. Sida, *On vector valued periodic distributions*, Theory and Applications of Mathematics & Computer Science, **2(1) (2012)**, 1-9. [Zbl. 1288.60016]
4. **S. Nădăban**, *Isomorphism Theorems for Quotient Hilbert Spaces*, Analele Universității de Vest din Timișoara, Seria Matematică-Informatică, **45(2) (2007)**, 93-98. [MR 2978028]
5. **S. Nădăban**, *On the Spectrum of a Morphism in Quotient Hilbert Spaces*, Surveys in Mathematics and its Applications, **1 (2006)**, 13-22. [Zbl 1147.47006] [MR 2274288]
6. **S. Nădăban**, *A Special Subcategory in the Category of Quotient Banach Spaces*, Analele Universității de Vest din Timișoara, Seria Matematică-Informatică, **43(1) (2005)**, 73-82. [Zbl 1119.47309][MR 2363336]
7. **S. Nădăban**, *Fredholm Pairs Associated to Fredholm Complexes*, Proceedings of the Scientific Communications Meeting of „Aurel Vlaicu” University, Third Edition, Arad, **14A (1996)**, 99-103. [Zbl 0916.47011] [MR 1667978]

## E. Publicații in extenso, apărute în volumele unor conferințe internaționale de specialitate

1. L. Popa, L. Sida, **S. Nădăban**, I. Dzitac, *Why Need for Fuzzy Logic in High School?*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, 7<sup>th</sup> Edition, Arad, May 17th-20th, 2018, pag. 100-104.
2. L.Sida, L. Popa, **S. Nădăban**, *On Fuzzy quaternion numbers*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, 6<sup>th</sup> Edition, Arad 8-10 December 2016, pag. 116-119.
3. **S. Nădăban**, A. Palcu, M. Tomescu, *Fuzzy metrizable of topological vector spaces*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, 4<sup>th</sup> Edition, Arad 8-9 November **2012**, pag. 1-6.
4. A. Palcu, **S. Nădăban**, A. Șandru, M. Tomescu, *Is the global symmetry  $L_e$ - $L_\mu$ - $L_T$  suitable for the neutrino sector in gauge models?*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, 4<sup>th</sup> Edition, Arad 8-9 November **2012**, pag.97-104.
5. **S. Nădăban**, A. Palcu, M. Tomescu, *On Fuzzy Banach Spaces*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, Third Edition, Arad 11-12 November **2010**, 133-138.
6. **S. Nădăban**, A. Șandru, C. Fifor, *Sequences in Ordered Fields*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, Third Edition, Arad 11-12 November **2010**, 230-236.
7. M. Tomescu, **S. Nădăban**, A. Palcu, *Intelligent Control System*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, Third Edition, Arad 11-12 November **2010**, 89-97.
8. A. Palcu, **S. Nădăban**, A. Șandru, *SU(4) – a suitable candidate for the extension of the Standard Model*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, Third Edition, Arad 11-12 November **2010**, 114-123.
9. **S. Nădăban**, *Duality in Quotient Hilbert Spaces*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, Second Edition, Arad 20-21 November **2008**, 101-106.
10. **S. Nădăban**, *Paraclosed Morphisms in Quotient Hilbert Spaces*, Proceedings of the International Symposium „Research and Education in an Innovation Era”, Arad 16-18 November **2006**, 74-81.

## F. Alte lucrări și contribuții științifice

1. **S. Nădăban**, *Positive Morphisms of Quotient Hilbert Spaces*, Bulletins for Applied & Computer Mathematics, BAM-CXII/**2008**, Nr 2358, Technical University of Budapest, pag. 67-76.

2. **S. Nădăban**, *The Local Spectrum of a Multi-morphism on Quotient Fréchet Spaces*, Proceedings of the 9th National Conference of the Romanian Mathematical Society, Lugoj 6-7 May, **2005**, pag. 236-248.
3. **S. Nădăban**, *On the Category  $qH$* , Analele Universității „Aurel Vlaicu” din Arad, Seria Matematică-Informatică, **2004**, pag. 48-53.
4. **S. Nădăban**, *Examples of Morphisms Between Quotient Hilbert Spaces*, Proceedings of the National Conference on Mathematical Analysis and Applications, Timișoara 12-13 December, **2000**, pag. 215-221.
5. **S. Nădăban**, *Shifturi speciale*, Studia Universitatis „Vasile Goldiș”, seria A, **6 (1996)**, 244-249.
6. **S. Nădăban**, *Spectrul operatorilor în spații Banach factor*, Studia Universitatis „Vasile Goldiș”, seria A, **6 (1996)**, 250-255.
7. **S. Nădăban**, M. Nagy, *Joint Spectra for a Family of Paraclosed Morphisms on Quotient Banach Spaces*, Bulletins for Applied Mathematics, 1285/1996, Technical University Budapest, pag. 461-468.
8. M. Nagy, **S. Nădăban**, *A Statistical Point of View on the Repeatability of Heat Storage Measurements*, Bulletins for Applied Mathematics, 1284/1996, Technical University Budapest, pag. 453-460.

## G. Participări la conferințe naționale și internaționale

1. A. Szabo, T. Bînzar, **S. Nădăban**, F. Pater, *Some properties of fuzzy bounded sets in fuzzy normed linear spaces*, International Conference on Numerical Analysis and Applied Mathematics (ICNAAM-2017), SEP 25-20, 2017, Greece.
2. A. Szabo, **S. Nădăban**, T. Binzar, F. Pater, *Strict inclusions between some classes of fuzzy relations*, 14<sup>th</sup> International Conference of Numerical Analysis and Applied Mathematics, ICNAAM, 19-25 September 2016, Greece.
3. **S. Nădăban**, *Neutrosophic sets and their applications to MCDM problems*, 6<sup>th</sup> International Conference on Computers, Communications and Control, Oradea, 10-14 Mai, 2016.
4. **S. Nădăban**, T. Bînzar, F. Pater, *Bounded operators on fuzzy Banach spaces*, 25<sup>th</sup> International Conference on Operator Theory, Timișoara, June 30 – July 5, 2014.
5. **S. Nădăban**, *Mulțimi fuzzy*, Conferința de Matematica „Tiberiu Popoviciu”, Arad, 17 mai 2014.
6. **S. Nădăban**, *Fuzzy Euclidean Normed Spaces*, 5<sup>th</sup> International Conference on Computers, Communications and Control, Oradea, 6-10 Mai, 2014.
7. **S. Nădăban**, *A short history of fuzzy normed linear spaces*, International Workshop on Operator Theory and Applications, Arad, 28-30 October, 2013.
8. **S. Nădăban**, *Fuzzy  $F$ -normed linear spaces*, International Workshop on Functional Analysis, Timișoara, October 12-14, 2012.
9. C. Șchiopu, E.Șișu, V. Udrescu, **S. Nădăban**, C. Fifor, A. Zamfir, *Sistem informatic de operare pentru interpretarea spectrelor de masă a gangliozidelor din creierul uman*, Conferința Diaspora în Cercetarea Științifică Românească, București 17-19 septembrie 2008.
10. C. Șchiopu, C. Mosoarca, E.Șișu, C. Fifor, **S. Nădăban**, Ž. Vukelic, A. Zamfir, *Optimization of novel in fragmentation techniques for polysialylated glycolipids*, The 5th Conference on Condensed Matter Physics, Timișoara 16-18 July 2008.
11. C. Șchiopu, E.Șișu, **S. Nădăban**, C. Fifor, Ž. Vukelic, A. Zamfir, *Computer software for the interpretation of brain ganglioside mass spectra*, International Symposium „Research and Education in an Innovation Era”, Second Edition, Arad 20-21 November 2008.
12. **S. Nădăban**, P. Gașpar, *On Discrete Periodically Correlated Random Fields*, A 21-a Conferință Internațională de Teoria Operatorilor, Timișoara, 2006.
13. **S. Nădăban**, *The Local Spectrum for a Finite Family of Morphisms*, La „30 de ani de Invățământ superior tehnic”, Universitatea „Aurel Vlaicu” din Arad, 2002.
14. **S. Nădăban**, *Asupra spectrului unui morfism pe spații factor*, Conferința Națională de Analiză Matematică, Universitatea Babeș-Bolyai din Cluj-Napoca, 2002.
15. **S. Nădăban**, *Asupra unor funcții de producție*, „Zilele Academice Arădene”, Universitatea de Vest „Vasile Goldiș” din Arad, 2001.
16. **S. Nădăban**, *Local spectral theory for multi-morphisms of quotient Fréchet spaces*, 18th International Conference on Operator Theory, June 27- July 1, 2000, University of the West, Timișoara, România.

17. **S. Nădăban**, A. Terescenco, F. Turcu, *The Adjoint of a Morphism Between Quotient Hilbert Spaces*, A 17-a Conferință Internațională de Teoria Operatorilor, Timișoara, 1998.

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