

LISTA DE LUCRĂRI

1. Cele mai relevante 10 articole pentru realizările profesionale obținute ulterior conferirii titlului de doctor în 2002

- [1] **A. L. Sasu**, B. Sasu, Discrete admissibility and exponential trichotomy of dynamical systems, Discrete and Continuous Dynamical Systems 34 (7) (2014), Paper ID: DCDS-A1385, in press.
- [2] B. Sasu, **A. L. Sasu**, On the dichotomic behavior of discrete dynamical systems on the half-line, Discrete and Continuous Dynamical Systems 33 (2013), 3057-3084.
- [3] **A. L. Sasu**, B. Sasu, Input-output admissibility and exponential trichotomy of difference equations, Journal of Mathematical Analysis and Applications 380 (2011), 17-32.
- [4] **A. L. Sasu**, On exact controllability of variational discrete systems, Applied Mathematics Letters 23 (2010), 101–104.
- [5] **A. L. Sasu**, Exponential dichotomy and dichotomy radius for difference equations, Journal of Mathematical Analysis and Applications 344 (2008), 906-920.
- [6] **A. L. Sasu**, Integral equations on function spaces and dichotomy on the real line, Integral Equations and Operator Theory 58 (2007), 133-152.
- [7] B. Sasu, **A. L. Sasu**, Exponential trichotomy and p -admissibility for evolution families on the real line, Mathematische Zeitschrift 253 (2006), 515-536.
- [8] **A. L. Sasu**, Stabilizability and controllability for systems of difference equations, Journal of Difference Equations and Applications 12 (2006), 821-826.
- [9] **A. L. Sasu**, B. Sasu, Exponential dichotomy on the real line and admissibility of function spaces, Integral Equations and Operator Theory 54 (2006), 113-130.
- [10] **A. L. Sasu**, B. Sasu, A lower bound for the stability radius of time-varying systems, Proceedings of the American Mathematical Society 132 (2004), 3653–3659.

2. Teza de doctorat

- [1] **A. L. Sasu**, Comportări asimptotice ale cocicililor peste fluxuri, Universitatea de Vest din Timișoara, teză susținută în 24.09.2002, Conducător științific: Prof. Dr. Mihail Megan.

3. Cărți și capitole în cărți

3.1. Cărți de specialitate

- [1] **A. L. Sasu**, Admisibilitate și proprietăți asimptotice ale cociclor, Colecția Matematici Moderne, Editura Politehnica, 2005, 228 pagini.
- [2] M. Megan, **A. L. Sasu**, B. Sasu, The Asymptotic Behaviour of Evolution Families, Editura Mirton, 2003, 228 pagini.

3.2. Cursuri universitare

- [3] B. Sasu, **A. L. Sasu**, Sisteme dinamice discrete, Editura Politehnica, 2013 (ediția 1 - 2006), 206 pagini.
- [4] M. Megan, **A. L. Sasu**, B. Sasu, Modelări matematice și comportări asimptotice ale sistemelor cu control, Editura Politehnica, 2008, 238 pagini.
- [5] **A. L. Sasu**, B. Sasu, Sisteme liniare cu control, Editura Politehnica, 2003, 282 pagini.

3.3. Capitole în cărți

- [6] B. Sasu, **A. L. Sasu**, Chapter 19: On stabilizability and detectability of variational control systems, pp. 441-454, Book: Robust Control, Theory and Applications, 2011, INTECH Austria, Viena, ISBN: 978-953-7619-X-X.

3.4. Culegeri de probleme

- [7] M. Megan, **A. L. Sasu**, B. Sasu, Calcul diferențial în $\mathbb{R}$ prin exerciții și probleme, Editura Mirton, 2003, 318 pagini.
- [8] M. Megan, **A. L. Sasu**, B. Sasu, Calcul integral în $\mathbb{R}$ prin exerciții și probleme, Editura Mirton, 2003, 384 pagini.
- [9] M. Megan, **A. L. Sasu**, B. Sasu, D. Juratoni, Lecții de analiză matematică. Primitive, Editura Brumar, 2002, 116 pagini.
- [10] Gh. Constantin, A. Opric, **A. L. Miuța (Sasu)**, Caracteristici numerice, valori medii condiționate, funcții generatoare și funcții caracteristice, Editura Universității de Vest, 1997, 168 pagini.

4. Articole publicate în reviste din fluxul științific internațional principal

4.1. Articole publicate în reviste clasificate ISI¹

- [1] **A. L. Sasu**, B. Sasu, Discrete admissibility and exponential trichotomy of dynamical systems, *Discrete and Continuous Dynamical Systems* 34 (7) (2014), Paper ID: DCDS-A1385, in press.
- [2] **A. L. Sasu**, M. G. Babuția, B. Sasu, Admissibility and nonuniform exponential dichotomy on the half-line, *Bulletin des Sciences Mathématiques* 137 (2013), 466-484.
- [3] **A. L. Sasu**, B. Sasu, On the asymptotic behavior of autonomous systems, *Asymptotic Analysis* 83 (2013), 303-329.
- [4] B. Sasu, **A. L. Sasu**, On the dichotomic behavior of discrete dynamical systems on the half-line, *Discrete and Continuous Dynamical Systems* 33 (2013), 3057-3084.
- [5] **A. L. Sasu**, M. Megan, B. Sasu, On Rolewicz-Zabczyk techniques in the stability theory of dynamical systems, *Fixed Point Theory* 13 (2012), 205-236.
- [6] **A. L. Sasu**, B. Sasu, Input-output admissibility and exponential trichotomy of difference equations, *Journal of Mathematical Analysis and Applications* 380 (2011), 17-32.
- [7] B. Sasu, **A. L. Sasu**, Nonlinear criteria for the existence of the exponential trichotomy in infinite dimensional spaces, *Nonlinear Analysis: Theory, Methods & Applications* 74 (2011), 5097-5110.
- [8] **A. L. Sasu**, B. Sasu, Translation invariant spaces and asymptotic properties of variational equations, *Abstract and Applied Analysis* (2011), Article ID 539026, 1-36.
- [9] **A. L. Sasu**, B. Sasu, Integral equations and exponential trichotomy of skew-product flows, *Advances in Difference Equations* (2011), Article ID 918274, 1-18.
- [10] **A. L. Sasu**, On exact controllability of variational discrete systems, *Applied Mathematics Letters* 23 (2010), 101-104.
- [11] **A. L. Sasu**, Pairs of function spaces and exponential dichotomy on the real line, *Advances in Difference Equations* (2010), Article ID 347670, 1-15.
- [12] **A. L. Sasu**, B. Sasu, Integral equations in the study of the asymptotic behavior of skew-product flows, *Asymptotic Analysis* 68 (2010), 135-153.
- [13] **A. L. Sasu**, B. Sasu, Integral equations, dichotomy of evolution families on the half-line and applications, *Integral Equations and Operator Theory* 66 (2010), 113-140.

¹Conform Thomson Reuters 2013 Journal Citation Reports.

- [14] **A. L. Sasu**, B. Sasu, Exponential trichotomy for variational difference equations, *Journal of Difference Equations and Applications* 15 (2009), 693-718.
- [15] **A. L. Sasu**, Exponential dichotomy and dichotomy radius for difference equations, *Journal of Mathematical Analysis and Applications* 344 (2008), 906-920.
- [16] **A. L. Sasu**, B. Sasu, On the unstable initial complement in exponential dichotomy on the half-line, *Analele Științifice ale Universității Al. I. Cuza din Iași* 54 (2008), 279-291.
- [17] **A. L. Sasu**, Integral equations on function spaces and dichotomy on the real line, *Integral Equations and Operator Theory* 58 (2007), 133-152.
- [18] **A. L. Sasu**, New criteria for exponential stability of variational difference equations, *Applied Mathematics Letters* 19 (2006), 1090-1094.
- [19] **A. L. Sasu**, Exponential dichotomy for evolution families on the real line, *Abstract and Applied Analysis* (2006), Article ID 31641, 1-16.
- [20] **A. L. Sasu**, Stabilizability and controllability for systems of difference equations, *Journal of Difference Equations and Applications* 12 (2006), 821-826.
- [21] **A. L. Sasu**, B. Sasu, Exponential dichotomy on the real line and admissibility of function spaces, *Integral Equations and Operator Theory* 54 (2006), 113-130.
- [22] B. Sasu, **A. L. Sasu**, Exponential trichotomy and p -admissibility for evolution families on the real line, *Mathematische Zeitschrift* 253 (2006), 515-536.
- [23] B. Sasu, **A. L. Sasu**, Exponential dichotomy and (ℓ^p, ℓ^q) -admissibility on the half-line, *Journal of Mathematical Analysis and Applications* 316 (2006), 397-408.
- [24] B. Sasu, **A. L. Sasu**, Input-output conditions for the asymptotic behavior of linear skew-product flows and applications, *Communications on Pure and Applied Analysis* 5 (2006), 551-569.
- [25] **A. L. Sasu**, B. Sasu, A lower bound for the stability radius of time-varying systems, *Proceedings of the American Mathematical Society* 132 (2004), 3653-3659.
- [26] **A. L. Sasu**, B. Sasu, Exponential stability for linear skew-product flows, *Bulletin des Sciences Mathématiques* 128 (2004), 727-738.
- [27] **A. L. Sasu**, Integral characterizations for stability of linear skew-product semi-flows, *Mathematical Inequalities and Applications* 7 (2004), 535-541.
- [28] B. Sasu, **A. L. Sasu**, Stability and stabilizability for linear systems of difference equations, *Journal of Difference Equations and Applications* 10 (2004), 1085-1105.
- [29] M. Megan, **A. L. Sasu**, B. Sasu, Perron conditions for pointwise and global exponential dichotomy of linear skew-product flows, *Integral Equations and Operator Theory* 50 (2004), 489-504.

- [30] M. Megan, B. Sasu, **A. L. Sasu**, Exponential expansiveness and complete admissibility for evolution families, Czechoslovak Mathematical Journal 54 (2004), 739-749.
- [31] M. Megan, **A. L. Sasu**, B. Sasu, Exponential instability of linear skew-product semiflows in terms of Banach function spaces, Results in Mathematics 45 (2004), 309-318.
- [32] M. Megan, **A. L. Sasu**, B. Sasu, Discrete admissibility and exponential dichotomy for evolution families, Discrete and Continuous Dynamical Systems 9 (2003), 383-397.
- [33] M. Megan, **A. L. Sasu**, B. Sasu, Theorems of Perron type for uniform exponential dichotomy of linear skew-product semiflows, Bulletin of the Belgian Mathematical Society Simon Stevin 10 (2003), 1-21.
- [34] M. Megan, **A. L. Sasu**, B. Sasu, Perron conditions for uniform exponential expansiveness of linear skew-product flows, Monatshefte für Mathematik 138 (2003), 145-157.
- [35] M. Megan, **A. L. Sasu**, B. Sasu, On uniform exponential stability of linear skew-product semiflows in Banach spaces, Bulletin of the Belgian Mathematical Society Simon Stevin 9 (2002), 143-154.
- [36] M. Megan, B. Sasu, **A. L. Sasu**, On nonuniform exponential dichotomy of evolution operators in Banach spaces, Integral Equations and Operator Theory 44 (2002), 71-78.
- [37] M. Megan, **A. L. Sasu**, B. Sasu, A. Pogan, Exponential stability and unstability of semigroups of linear operators in Banach spaces, Mathematical Inequalities and Applications 5 (2002), 557-567.
- [38] M. Megan, **A. L. Sasu**, B. Sasu, Stabilizability and controllability of systems associated to linear skew-product semiflows, Revista Matemática Complutense 15 (2002), 599-618.
- [39] M. Megan, B. Sasu, **A. L. Sasu**, Theorems of Rolewicz type for periodic evolution operators, Mathematical Reports 54 (2002), 389-399.
- [40] M. Megan, **A. L. Sasu**, B. Sasu, On approximate controllability of systems associated to linear skew product semiflows, Analele Științifice ale Universității Al. I. Cuza din Iași 47 (2001), 377-388.

4.2. Articole publicate în jurnale care erau clasificate ISI la data publicării articolului²

- [41] **A. L. Sasu**, B. Sasu, Discrete admissibility, l^p -spaces and exponential dichotomy on the real line, Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis 13 (2006), 551-561.

²Conform ISI Web of Science.

- [42] **A. L. Sasu**, B. Sasu, Exponential dichotomy and admissibility for evolution families on the real line, *Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis* 13 (2006), 1-26.
- [43] M. Megan, **A. L. Sasu**, B. Sasu, Theorems of Perron type for uniform exponential stability of linear skew-product semiflows, *Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis* 12 (2005), 23-43.
- [44] M. Megan, **A. L. Sasu**, B. Sasu, Uniform exponential dichotomy and admissibility for linear skew-product semiflows, *Recent Advances in Operator Theory, Operator Algebras and Their Applications, Operator Theory Advances and Applications* 153 (2005), 185-195, Birkhäuser Basel.

4.3. Articole publicate în alte jurnale din străinătate

- [45] **A. L. Sasu**, On exponential expansiveness of linear skew-product flows, *Dynamics of Continuous Discrete and Impulsive Systems Series A Mathematical Analysis* 16 (2009), 397-412.
- [46] **A. L. Sasu**, On exponential stability of variational difference equations, *Advances in Dynamical Systems and Applications* 1 (2006), 91-101.
- [47] **A. L. Sasu**, Exponential instability and complete admissibility for semigroups in Banach spaces, *Rendiconti del Seminario Matematico dell'Università e del Politecnico di Torino* 63 (2005), 141-151.
- [48] **A. L. Sasu**, Discrete methods and exponential dichotomy of semigroups, *Acta Mathematica Universitatis Comenianae* 73 (2004), 197-205.
- [49] M. Megan, **A. L. Sasu**, B. Sasu, Exponential stability and exponential instability for linear skew-product flows, *Mathematica Bohemica* 129 (2004), 225-243.
- [50] M. Megan, **A. L. Sasu**, B. Sasu, Banach function spaces and exponential instability of evolution families, *Archivum Mathematicum (Brno)* 39 (2003), 277-286.
- [51] M. Megan, **A. L. Sasu**, B. Sasu, Perron conditions and uniform exponential stability of linear skew-product semiflows on locally compact spaces, *Acta Mathematica Universitatis Comenianae* 70 (2001), 229-240.
- [52] M. Megan, B. Sasu, **A. L. Sasu**, Theorems of Perron type for evolution operators, *Rendiconti di Matematica (Roma)* 21 (2001), 231-244.
- [53] M. Megan, B. Sasu, **A. L. Sasu**, On uniform exponential stability of evolution families, *Rivista di Matematica della Università di Parma* 4 (2001), 27-43.
- [54] M. Megan, **A. L. Sasu**, B. Sasu, Nonuniform exponential instability of evolution operators in Banach spaces, *Glasnik Matematički* 56 (2001), 287-296.

- [55] M. Megan, **A. L. Sasu**, B. Sasu, On uniform exponential stability of periodic evolution operators in Banach spaces, *Acta Mathematica Universitatis Comenianae* 69 (2000), 97-106.

4.4. Articole publicate în reviste din România indexate în baze de date internaționale

- [56] **A. L. Sasu**, Input-output conditions for uniform dichotomy of difference equations, *Analele Universității de Vest din Timișoara Seria Matematică Informatică* 47 (2009), fasc. 3, 167–175.
- [57] **A. L. Sasu**, B. Sasu, Input-output conditions for exponential trichotomy of dynamical systems, *Revue d'Analyse Numérique et de Théorie de l'Approximation* 37 (2008), 209-215.
- [58] **A. L. Sasu**, B. Sasu, Exponential expansiveness of variational dynamical systems, *Analele Universității de Vest din Timișoara Seria Matematică Informatică* 45 (2007), fasc. 2., 155–168.
- [59] **A. L. Sasu**, (L^p, L^q) -complete admissibility and exponential expansiveness of linear skew-product flows, *Mathematica* 48 (2006), 69-76.
- [60] **A. L. Sasu**, Nonlinear orbits and uniform exponential stability of evolution families, *Analele Universității de Vest din Timișoara Seria Matematică Informatică* 42 (2004), fasc. 1, 119-127.
- [61] **A. L. Sasu**, Perron conditions with sequence spaces for linear skew-product flows, *Analele Universității de Vest din Timișoara Seria Matematică Informatică* 42 (2004), fasc. 2, 87-96.
- [62] **A. L. Sasu**, Exponential expansiveness with ℓ^p -spaces for linear skew-product flows, *Analele Universității de Vest din Timișoara Seria Matematică Informatică* 41 (2003), fasc. 2, 97-111.
- [63] M. Megan, **A. L. Sasu**, B. Sasu, On a theorem of Rolewicz type for linear skew-product semiflows, *Seminar on Fixed Point Theory* 3 (2002), 63–72.
- [64] M. Megan, **A. L. Sasu**, B. Sasu, An evolution semigroup approach for exponential stability of linear skew-product semiflows, *Analele Universității din Craiova Seria Matematică-Informatică* 29 (2002), 40-46.
- [65] **A. L. Sasu**, B. Sasu, On stability of periodic evolution operators in Banach spaces, *Analele Universității de Vest din Timișoara Seria Matematică Informatică* 39 (2001), 147-156.
- [66] M. Megan, **A. L. Sasu**, B. Sasu, Nonuniform asymptotic behaviour of evolution operators in Banach spaces, *Studia Universitatis Babeș-Bolyai Mathematica* 45 (2000), 39-50.

- [67] M. Megan, **A. L. Sasu**, B. Sasu, On exponential stability of C_0 -semigroups in Banach spaces, *Analele Universității de Vest din Timișoara Seria Matematică Informatică* 37 (1999), 95-104.

5. Articole publicate în extenso în volume de conferințe

5.1. Articole publicate în extenso în volume de conferințe internaționale

- [1] **A. L. Sasu**, B. Sasu, Stability and stabilizability of variational discrete systems, pp. 1049-1058, Vol. III, *Proceedings of the 11th International Conference on Computational and Mathematical Methods in Science and Engineering*, 2011, ISBN 978-84-614-6167-7.
- [2] B. Sasu, **A. L. Sasu**, Input-output conditions for expansiveness of dynamical systems, Chapter 22, pp. 240–246, *Proceedings of The International Conference on Mathematical Problems in Engineering, Aerospace and Sciences: ICNPAA 2008*, Cambridge Scientific Publishers 2009, ISBN: 978-1-904-86880-4.

5.2. Articole publicate în extenso în volume de conferințe naționale

- [3] M. Megan, B. Sasu, **A. L. Sasu**, Admissibility and dichotomy on the half-line, *Proceedings of the 9th National Conference of The Romanian Mathematical Society*, 2005, 211-220.
- [4] M. Megan, **A. L. Sasu**, B. Sasu, On uniform exponential expansiveness of evolution families, *Proceedings of the Conference on Analysis, Functional Equations, Approximation Theory and Convexity, Cluj-Napoca*, 2004, 139-147.
- [5] M. Megan, **A. L. Sasu**, B. Sasu, Criteria for uniform exponential instability of linear skew-product semiflows, *Proceedings of the Conference on Analysis, Functional Equations, Approximation Theory and Convexity, Cluj-Napoca*, 2002, 153-163.
- [6] M. Megan, **A. L. Sasu**, B. Sasu, The uniform exponential bound of linear skew-product semiflows, *Proceedings of the National Conference on Mathematical Analysis and Applications, Timișoara*, 2000, 189-196.
- [7] **A. L. Sasu**, B. Sasu, M. Megan, A discrete variant of a theorem of Littman, *Proceedings of the Conference on Analysis, Functional Equations, Approximation Theory and Convexity, Cluj-Napoca*, 1999, 282-290.
- [8] **A. L. Sasu**, B. Sasu, M. Megan, On uniform exponential stability of C_0 -semigroups in Banach spaces, *Proceedings of the Conference on Analysis, Functional Equations, Approximation Theory and Convexity, Cluj-Napoca*, 1999, 291-298.
- [9] M. Megan, **A. L. Sasu**, B. Sasu, On nonuniform exponential stability and Perron condition in Banach spaces, *Proceedings of the 3rd National Conference of The Romanian Mathematical Society, Craiova*, 1999, 133-141.

6. Editoare de volum de conferință

- [1] Proceedings of the 8th National Conference on Mathematical Analysis and Applications, Timișoara 1–2 Decembrie 2006, Analele Universității de Vest din Timișoara Seria Matematică-Informatică 45 (2007), fasc. 1, 277 pagini, Editori: D. Gașpar, **A. L. Sasu**, B. Sasu.
- [2] Proceedings of the 8th National Conference on Mathematical Analysis and Applications, Timișoara 1–2 Decembrie 2006, Analele Universității de Vest din Timișoara Seria Matematică-Informatică 45 (2007), fasc. 2, 249 pagini, Editori: D. Gașpar, **A. L. Sasu**, B. Sasu.

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Timișoara, 11 noiembrie 2013