

# List of scientific papers

## Claudia-Luminița Mihiț, Lecturer Ph. D.

### I. PhD Thesis

*Concepts of splitting for skew-evolution semiflows in Banach spaces*, West University of Timișoara, scientific coordinator: Bogdan Sasu, Professor Ph. D.

### II. Scientific articles published in journals from the main international scientific flow

#### II.1. Scientific articles published in ISI/ Web of Science rated journals/ volumes

1. L. E. Biriș, T. Ceaușu, **C. L. Mihiț**, I.-L. Popa, *Uniform exponential trisplitting-A new criterion for discrete skew-product semiflows*, Electronic Journal of Qualitative Theory of Differential Equations 70 (2019), 1-22.
2. **C. L. Mihiț**, M. Lăpădat, *Discrete criteria for the uniform  $(h,k)$ -splitting of skew-evolution semiflows*, AIP Conference Proceedings, vol. 1978 (2018), Article No. 390011-1, 1-4.
3. **C. L. Mihiț**, M. Megan, *Integral characterizations for the  $(h,k)$ -splitting of skew-evolution semiflows*, Studia Universitatis Babeș-Bolyai Mathematica 62 (2017), No. 3, 353-365.
4. **C. L. Mihiț**, M. Megan, T. Ceaușu, *The equivalence of Datko and Lyapunov properties for  $(h,k)$ -trichotomic linear discrete-time systems*, Discrete Dynamics in Nature and Society, vol. 2016, Article ID 3700262, 1-8.
5. **C. L. Mihiț**, D. Borlea, *On some concepts of exponential stability for skew-evolution semiflows in Banach spaces*, Proceedings of 11th IEEE International Symposium on Applied Computational Intelligence and Informatics, Timișoara, May 12-14, 2016, România, 167-172.
6. P. Preda, **C. L. Mihiț**, *Discrete Lyapunov theory for evolution families*, Acta Mathematica Universitatis Comenianae 84 (2015), no. 1, 149-166.

#### II.2. Scientific articles published in BDI rated journals

1. L. E. Biriș, T. Ceaușu, **C. L. Mihiț**, *On uniform exponential splitting of variational nonautonomous difference equations in Banach spaces*, Difference Equations, Discrete Dynamical Systems and Applications, Springer Proceedings in Mathematics & Statistics, vol. 287 (2019), 199-213.

2. M. Megan, **C. L. Mihuț**, R. Lolea, *On splitting with different growth rates for linear discrete-time systems in Banach spaces*, Difference Equations, Discrete Dynamical Systems and Applications, Springer Proceedings in Mathematics & Statistics, vol. 287 (2019), 351-368.
3. **C. L. Mihuț**, *On some nonuniform dichotomic behaviors of discrete skew-product semiflows*, Theory and Applications of Mathematics & Computer Science 9 (2019), 1-7.
4. L. E. Biriș, **C. L. Mihuț**, T. Ceaușu, I. L. Popa, *On uniform exponential trisplitting for cocycles of linear operators in Banach spaces*, Analele Universității de Vest din Timișoara, Seria Matematică-Informatică 56 (2018), fasc. 2, 81-103.
5. L. E. Biriș, T. Ceaușu, **C. L. Mihuț**, *On uniform exponential splitting for cocycles of linear operators in Banach spaces*, Annals of the Academy of Romanian Scientists, Series on Mathematics and its Applications 10 (2018), 110-127.
6. L. E. Biriș, T. Ceaușu, **C. L. Mihuț**, I. L. Popa, *On uniform exponential trisplitting of discrete skew-product semiflows*, Electronic Notes in Discrete Mathematics 67 (2018), 91-96.
7. G. Moț, **C. L. Mihuț**, *On Orthogonal Polynomials*, Theory and Applications of Mathematics & Computer Science, 8(2), (2018), 135-142.
8. **C. L. Mihuț**, *Lyapunov functionals for skew-evolution semiflows in Banach spaces*, Buletinul Științific al Universității Politehnica din Timișoara, Seria Matematică-Fizică 63 (2018), 49-57.
9. **C. L. Mihuț**, D. Borlea, M. Megan, *On some concepts of  $(h,k)$ -splitting for skew-evolution semiflows in Banach spaces*, Annals of the Academy of Romanian Scientists, Series on Mathematics and its Applications 9 (2017), 186-204.
10. **C. L. Mihuț**, M. Lăpădat, *On uniform polynomial dichotomy of skew-evolution semiflows on the half-line*, Buletinul Științific al Universității Politehnica din Timișoara, Seria Matematică-Fizică 62 (2017), 54-61.
11. **C. L. Mihuț**, *On uniform  $h$ -stability of evolution operators in Banach spaces*, Theory and Applications of Mathematics & Computer Science 6 (2016), 19-27.
12. **C. L. Mihuț**, C. Stoica, M. Megan, *On uniform exponential splitting for noninvertible evolution operators in Banach spaces*, Analele Universității de Vest din Timișoara, Seria Matematică-Informatică 53 (2015), fasc. 2, 121-131.
13. M. I. Kovacs, M. Megan, **C. L. Mihuț**, *On  $(h,k)$ -dichotomy and  $(h,k)$ -trichotomy of noninvertible evolution operators in Banach spaces*, Analele Universității de Vest din Timișoara, Seria Matematică-Informatică 52 (2014), fasc. 2, 127-143.

### **III. Scientific articles published in the volumes of international conferences**

1. M. Aldescu, **C. L. Mihiț**, *On input-output techniques for the stability of evolution families*, Proceedings of the International Symposium "Research and Education in Innovation Era", Section Mathematics & Computer Science, 7th Edition, "Aurel Vlaicu" University of Arad Publishing House (2018), 85-92.
2. **C. L. Mihiț**, *Notions of splitting type for skew-evolution semiflows in Banach spaces*, Proceedings of the 15th International Conference on Mathematics and its Applications, Timișoara, 1-3 noiembrie 2018, 105-113.
3. **C. L. Mihiț**, R. Lolea, *Lyapunov functions for trichotomy with different growth rates*, Proceedings of the 8th International Conference on Theory and Applications in Mathematics and Informatics, Alba Iulia, 17-20 septembrie 2015, 77-93.
4. **C. L. Mihiț**, M. Megan, *On uniform exponential dichotomy of skew-evolution semiflows in Hilbert spaces*, Proceedings of the International Symposium "Research and Education in Innovation Era", Section Mathematics & Computer Science, 6th Edition, "Aurel Vlaicu" University of Arad Publishing House (2016), 30-37.

### **IV. Books**

#### **IV1. Published at Romanian publishing houses**

1. G. Moț, **C. L. Mihiț**, *Algebra. Seminar and course support*, "Aurel Vlaicu" Univ. Publishing House Arad, 2019, 162 pag, ISBN: 978-973-752-809-4.

#### **IV2. Support of courses, seminars, laboratory works, projects in electronic versions**

1. G. Moț, **C. L. Mihiț**, *Suport de curs și seminar la Algebră liniară, geometrie analitică și diferențială*, 2017.
2. G. Moț, **C. L. Mihiț**, *Suport de curs și seminar la Matematică I*, 2017.
3. G. Moț, **C. L. Mihiț**, *Suport de curs și seminar la Matematică aplicată în economie*, 2018.
4. G. Moț, **C. L. Mihiț**, *Suport de curs și seminar la Analiză matematică*, 2018.
5. G. Moț, **C. L. Mihiț**, *Suport de curs și seminar la Fundamentele algebrice ale informaticii*, 2018.

6. G. Moț, **C. L. Mihiț**, *Suport de curs și seminar la Algebră liniară, geometrie analitică și diferențială*, 2018.
7. G. Moț, **C. L. Mihiț**, *Suport de curs și seminar la Ecuații diferențiale și cu derivate parțiale*, 2019.

## **V. Participations at international conferences**

1. **C. L. Mihiț**, *On some nonuniform dichotomic behaviors of discrete skew-product semiflows*, ISREIE 2019 - International Symposium "Research and Education in Innovation Era", Section Mathematics & Computer Science, 8th Edition, "Aurel Vlaicu" University of Arad, 23-25 mai 2019, România.
2. L. E. Biriș, T. Ceaușu, **C. L. Mihiț**, I.-L. Popa, *Uniform exponential trisplitting - A new criterion for discrete skew-product semiflows*, 2nd IMA Conference on Theoretical and Computational Discrete Mathematics, Derby, 14-15 septembrie 2018, United Kingdom.
3. **C. L. Mihiț**, *On some splitting concepts for cocycles of linear operators in Banach spaces*, OT 27-27th International Conference in Operator Theory, Timișoara, 2-6 iulie 2018, România.
4. L. E. Biriș, T. Ceaușu, **C. L. Mihiț**, I.-L. Popa, *On uniform exponential trisplitting of discrete skew-product semiflows*, MACOS 2018- International Conference on Mathematics and Computer Science, 3rd Edition, Brașov, 14-16 iunie 2018, România.
5. **C. L. Mihiț**, *Notions of splitting type for skew-evolution semiflows in Banach spaces*, ICMA 2018- The 15th International Conference on Mathematics and its Applications, Politehnica University of Timișoara, 1-3 noiembrie 2018, România.
6. M. Aldescu, **C. L. Mihiț**, *On input-output techniques for the stability of evolution families*, ISREIE 2018- International Symposium "Research and Education in Innovation Era", Section Mathematics & Computer Science, 7th Edition, "Aurel Vlaicu" University of Arad, 17-20 mai 2018, România.
7. **C. L. Mihiț**, R. Lolea, M. Megan, *On splitting with different growth rates for linear discrete-time systems in Banach spaces*, ICDEA 2017- 23rd International Conference on Difference Equations and Applications, Timișoara, 24-28 iulie 2017, România.
8. L. Biriș, T. Ceaușu, **C. L. Mihiț**, *On uniform exponential splitting of variational nonautonomous difference equations in Banach spaces*, ICDEA 2017- 23rd International Conference on Difference Equations and Applications, Timișoara, 24-28 iulie 2017, România.
9. M. Megan, **C. L. Mihiț**, D. Borlea, *Nonuniform asymptotic properties of skew-evolution semiflows with growth rates on the half-line*, CSM- The 4th Conference of PhD Students in Mathematics,

Szeged, 27-29 iunie 2016, Ungaria.

10. **C. L. Mihit**, *Asupra comportărilor asimptotice ale sistemelor dinamice discrete cu diverse rate de creștere*, Conferința "Diaspora în Cercetarea Științifică și Învățământul Superior din România-Diaspora și prietenii săi", Timișoara, 25-28 aprilie 2016, România.

11. **C. L. Mihit**, D. Borlea, *On some concepts of exponential stability for skew-evolution semiflows in Banach spaces*, SACI 2016- 11th Jubilee IEEE International Symposium on Applied Computational Intelligence and Informatics, Timișoara, 12-14 mai 2016, România.

12. **C. L. Mihit**, M. Megan, *On uniform exponential dichotomy of skew-evolution semiflows in Hilbert spaces*, ISREIE 2016- International Symposium "Research and Education in Innovation Era", Section Mathematics & Computer Science, 6th Edition, "Aurel Vlaicu" University of Arad, 8-10 decembrie 2016, România.

13. M. Megan, **C. L. Mihit**, *On asymptotic behaviors of skew-evolution semiflows in Banach spaces*, Differential Equations Seminar, Department of Applied and Numerical Mathematics (Bolyai Institute), University of Szeged, 10 noiembrie 2015, Ungaria.

14. M. Megan, **C. L. Mihit**, C. Stoica, *Lyapunov functions in the study of  $h$ -dichotomy for skew-evolution semiflows in Banach spaces*, International Conference on Nonlinear Operators, Differential Equations and Applications, Cluj-Napoca, 14-17 iulie 2015, România.

15. **C. L. Mihit**, *On  $(h, k, \mu, \nu)$ -splitting of evolution operators in Banach spaces*, Advanced Research and Multidisciplinary Dialogue in the Third Millenium, Szeged, 26-27 noiembrie 2015, Ungaria.

16. **C. L. Mihit**, M. Lăpădat, *On some asymptotical behaviors of linear discrete-time systems in infinite-dimensional spaces*, SACI 2015- 10th Jubilee IEEE International Symposium on Applied Computational Intelligence and Informatics, Timișoara, 21-23 mai 2015, România.

17. **C. L. Mihit**, R. Lolea, *Lyapunov functions for trichotomy with different growth rates*, ICTAMI 2015- International Conference on Theory and Applications in Mathematics and Informatics, Alba Iulia, 17-20 septembrie 2015, România.

18. C. Stoica, M. Megan, **C. L. Mihit**, *On  $(h,k)$ -trichotomy and  $(h,k)$ -splitting for cocycles of linear operators in Banach spaces*, ICMA 2015 - The 14th International Conference on Mathematics and its Applications, Politehnica University of Timișoara, 5-7 noiembrie 2015, România.

## **VI. Participations at national conferences**

1. **C. L. Mihit**, *On splitting concepts for dynamical systems in Banach spaces*, CSDCU-MIF2020- Conferința Școlilor Doctorale din Consorțiul Universitaria, Ediția a III-a, 22-24 octombrie 2020,

online.

2. **C. L. Mihiț**, *On some splitting properties in infinite-dimensional spaces*, RISMAA- First Romanian Itinerant Seminar on Mathematical Analysis and its Applications, Cluj-Napoca, 20-21 aprilie 2018.
3. **C. L. Mihiț**, *Cocicli de evoluție în spații Banach*, Conferința doctoranzilor, Universitatea de Vest din Timișoara, 2018.
4. M. Megan, C. Stoica, **C. L. Mihiț**, *Stability, dichotomy and splitting for evolutions equations in Banach spaces*, The Spring Scientific Session of the Academy of Romanian Scientists, București, 2017.
5. M. Megan, **C. L. Mihiț**, *Asymptotical behaviors of linear discrete-time systems in Banach spaces*, The Spring Scientific Session of the Academy of Romanian Scientists, București, 2016.
6. M. Megan, C. Stoica, **C. L. Mihiț**, *On some concepts of asymptotic behaviors for cocycles of linear operators in Banach spaces*, The Spring Scientific Session of the Academy of Romanian Scientists, București, 2015.

## VII. Research projects

1. Participation in the project “Competitive multidisciplinary doctoral research at European level (CDocMD) POSDRU/187/1.5/S/155559”
2. Research grant within the project “Excellence research in UVT by supporting and developing the university's research centers (FDI-2018-0389)”, project coordinator: Mădălin Bunoiu

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