



Nume Prenume: Suciu Laurian
Gradul didactic: Profesor universitar doctor
Instituția unde este titular: Universitatea "Lucian Blaga" din Sibiu
Facultatea: Științe
Departamentul: Matematică și Informatică

L I S T A

lucrărilor științifice și a proiectelor de cercetare

A. Teza de doctorat și abilitare

Titlul de doctor în domeniul *Matematică* /anul 2006

Titlul tezei de doctorat "*Structure, ergodicity and applications of A-contractions*", University Claude Bernard Lyon 1, France.

Atestatul de Abilitare și calitatea de conducător de doctorat în domeniul Matematică. (OM nr. 3966/07.06.2016)

C. Lucrări indexate ISI / BDI publicate în întreaga activitate

C1- Lucrări indexate ISI

Research Activity:

2021-2025

1. Andra-Maria Stoica, Laurian Suciu, *The Wold-type decomposition and the kernel condition for quasi-isometries*, Czechoslovak Mathematical Journal, vol. 75, no. 3 (2025), pp. 1049-1072. <https://doi.org/10.21136/CMJ.2025.0071-25>
2. L. Suciu, A.-M. Stoica, *Quasi-isometric liftings for operators similar to contractions*. Linear Algebra and its Applications, 709, (2025), 40–57. <https://doi.org/10.1016/j.laa.2025.01.006>
3. Laurian Suciu, *On expansive three-isometries*, Opuscula Math. 44, no. 6 (2024), 883–898.
4. Aurelian Craciunescu, Laurian Suciu and Elisabeta-Alina Totoi, *Couplings of Operators with Two-Isometries in Three-Isometric Liftings*, Mediterranean Journal of Mathematics, 21:2, 2024. DOI10.1007/s00009-024-02601-8
5. Laurian Suciu, *Wold Decompositions and Brownian type operators*, Revue Roumaine de Mathematiques Pures et Appliquees, 68 3-4, 369-381, 2023.
6. Laurian Suciu, *Operators with expansive m-isometric liftings*, Monatshefte für Mathematik, 2022, 1-23. <https://doi.org/10.1007/s00605-021-01648-z>
7. Laurian Suciu, *Operators with Brownian unitary dilations*, Carpathian J. Math., vol. 38, 2022, No. 3, 619-630.
8. Laurian Suciu: *Asymptotic properties for compressions of two-isometries*, Quaestiones Mathematicae, 2022, 1-26. DOI: 10.2989/16073606.2022.2131651
9. Laurian Suciu, Elisabeta Alina Totoi, *Three-isometric liftings with invariant isometric part*, Banach J. Math. Anal. 2021 15:66. <https://doi.org/10.1007/s43037-021-00150-w>
10. Catalin Badea, Vladimir Muller, and Laurian Suciu, *High order isometric liftings and dilations*, Studia Mathematica, 258 (1), 2021, 87-101. DOI: 10.4064/sm200330-25-8
11. Catalin Badea and Laurian Suciu, *Hilbert spaces operators with two isometric dilations*, Journal of Operator Theory, 86:1 2021, 93–123.doi: 10.7900/jot.2020feb05.2298.



12. Witold Majdak and Laurian Suciu, *Convex and expansive liftings close to two-isometries and power bounded operators*, *Linear Algebra and its Applications*, 617, 2021, 1-26. <https://doi.org/10.1016/j.laa.2021.01.009>
13. Witold Majdak and Laurian Suciu, *Triangulations of Operators with Two-Isometric Liftings*, *Integral Equations and Oper. Theory*, 2021,93:10.<https://doi.org/10.1007/s00020-021-02625-9>

2009-2020

14. Laurian Suciu, *Liftings and extensions of operators in Brownian setting*, pp. 1-18, 2020, *Linear and Multilinear Algebra*. <https://doi.org/10.1080/03081087.2020.1819948>
15. Laurian Suciu, *On operators with two-isometric liftings*, *Complex Analysis and Operator Theory*, 14:5, 1-16, 2020. <https://doi.org/10.1007/s11785-019-00960-9>
16. Witold Majdak and Laurian Suciu, *Brownian type parts of operators in Hilbert spaces*, *Results in Mathematics*, 75:5, 1-23, 2020.<https://doi.org/10.1007/s00025-019-1130-8>
17. Witold Majdak and Laurian Suciu, *Brownian isometric parts of concave operators*, *New York J. Math.* 25, 1067–1090, 2019. <http://nyjm.albany.edu/j/2019/25-46.html>
18. Catalin Badea and Laurian Suciu, *Similarity problems, Folner sets and isometric representations of amenable semigroups*, *Mediterranean Journal of Mathematics* 16:5, 2019. <https://doi.org/10.1007/s00009-018-1294-6>
19. Catalin Badea, Laurian Suciu, *The Cauchy dual and 2-isometric liftings of concave operators*, *Journal of Mathematical Analysis and Applications*, Volume 472, Issue 2, 1458-1474, 2019. <https://doi.org/10.1016/j.jmaa.2018.12.002>
20. Catalin Badea, Laurian Suciu, Harnack and Shmul'yan pre-order relations for Hilbert space contractions, *Indagationes Mathematicae*, Volume 28, Issue 4, 892-912, 2017. <https://doi.org/10.1016/j.indag.2017.06.012>
21. Laurian Suciu, *Estimations of the operator resolvent by higher order Cesaro means*, *Results in Mathematics* 69(3), pp. 457-475, 2016. <https://doi.org/10.1007/s00025-016-0533-z>
22. Witold Majdak, Mostafa Mbekhta, and Laurian Suciu, *Operators intertwining with isometries and Brownian parts of 2-isometries*, *Linear Algebra and its Applications* 509 (15), 168-190, 2016. <https://doi.org/10.1016/j.laa.2016.07.014>
23. Mostafa Mbekhta and Laurian Suciu, *Generalized inverses and similarity to partial isometries*, *Journal of Mathematical Analysis and Applications* vol. 372, issue 2, pp. 559-564, 2010. <https://doi.org/10.1016/j.jmaa.2010.06.022>
24. Mostafa Mbekhta and Laurian Suciu, *Classes of operators similar to partial isometries*, *Integral Equations and Operator Theory* Volume 63, Number 4, pp. 571-590, 2009. <https://doi.org/10.1007/s00020-009-1671-4>

Scientific contribution :

2021-2025

25. Laurian Suciu, Andra-Maria Stoica, *Left-Invertible Quasi-Isometric Liftings.*, *Bull. Malays. Math. Sci. Soc.* 48, 136 (2025), 22 pages. <https://doi.org/10.1007/s40840-025-01920-7>
26. Aurelian Craciunescu and Laurian Suciu, *Brownian extensions in the context of three-isometries*, *Journal of Mathematical Analysis and Applications* vol. 529, 1, 127591, 2024. <https://doi.org/10.1016/j.jmaa.2023.127591>
27. Laurian Suciu, *Brownian Type Extensions for a Class of m-Isometries*, *Results in Mathematics*, 78 4, 1-29, 2023. <https://link.springer.com/content/pdf/10.1007/s00025-023-01917-3.pdf>

2006-2017

28. Laurian Suciu, *Ergodic behaviors of the regular operator means*, *Banach Journal of Mathematical Analysis*, 11, No. 2, 239-265, 2017. doi:10.1215/17358787-3796878
29. Catalin Badea, Laurian Suciu, and Dan Timotin, *Classes of contractions and Harnack domination*, *Revista Matematica Iberoamericana*, 33 (2), 469-488, 2017. DOI: 10.4171/RMI/945

30. Alexandru Aleman and Laurian Suciu, *On ergodic operator means in Banach spaces*, Integral Equations and Operator Theory, vol. 85 pp. 259-287, 2016. <https://doi.org/10.1007/s00020-016-2298-x>
31. Mostafa Mbekhta and Laurian Suciu, *Partial isometries and the conjecture of C. K. Fong and S. K. Tsui*, Journal of Mathematical Analysis and Applications Vol. 437, pp. 431-444, 2016. <https://doi.org/10.1016/j.jmaa.2015.12.057>
32. Michael Lin, David Shoikhet, and Laurian Suciu, *Remarks on uniform ergodic theorems*, Acta Sci. Math. (Szeged) Vol. 81, pp. 251-283, 2015. DOI: 10.14232/actasm-012-307-4
33. Laurian Suciu and Jaroslav Zemánek, *Growth conditions on Cesaro means of higher order*, Acta Sci. Math. (Szeged) Vol. 79, no 3-4, pp. 545-581, 2013.
34. Mostafa Mbekhta and Laurian Suciu, *Quasi-isometries associated to A -contractions*, Linear Algebra and its Applications Vol. 459, pp. 430-453, 2014. <https://doi.org/10.1016/j.laa.2014.07.016>
35. Laurian Suciu and Nicolae Suciu, *Borel-Carathéodory and Fan Type Inequalities for Hilbert space bicontractions*, Complex Analysis and Operator Theory Vol. 8, Issue 1, pp. 227-241, 2014. <https://doi.org/10.1007/s11785-013-0291-9>
36. Laurian Suciu, *Saturation for Cesaro means of higher order*, Operators and Matrices Vol. 7, no. 3, pp. 557-572, 2013. [dx.doi.org/10.7153/oam-07-30](https://doi.org/10.7153/oam-07-30)
37. Witold Majdak, Nicolae Adrian Secelean, and Laurian Suciu, *Ergodic properties for operators in semi-Hilbertian spaces*, Linear and Multilinear Algebra Vol. 61, Issue 2, pp. 139-159, 2013. <https://doi.org/10.1080/03081087.2012.667094>
38. Marek Kosiek and Laurian Suciu, *Decompositions and asymptotic limit for bicontractions*, Annales Polonici Mathematici 105.1, pp. 43-64, 2012. DOI: 10.4064/ap105-1-5
39. Laurian Suciu, *Quasi-isometries in semi-Hilbertian spaces*, Linear Algebra and its Applications Volume 430, Issues 8-9, pp. 2474-2487, 2009. <https://doi.org/10.1016/j.laa.2008.12.021>
40. Laurian Suciu and Nicolae Suciu, *Asymptotic behaviours and generalized Toeplitz operators*, Journal of Mathematical Analysis and Applications vol. 349, issue 1, pp. 280-290, 2009. <https://doi.org/10.1016/j.jmaa.2008.08.028>
41. Laurian Suciu, *Maximum A -isometric part of an A -contraction and applications*, Israel Journal of Mathematics vol. 174, pp. 419-442, 2009. <https://doi.org/10.1007/s11856-009-0121-y>
42. Laurian Suciu, *Uniformly ergodic A -contractions on Hilbert spaces*, Studia Mathematica vol. 194, pp. 1-22, 2009. DOI: 10.4064/sm194-1-1
43. Laurian Suciu and Nicolae Suciu, *Ergodic conditions and spectral properties for A -contractions*, Opuscula Mathematica Vol. 28, No. 2, pp. 195 – 216, 2008. <https://www.opuscula.agh.edu.pl/om-vol28iss2art8>
44. Laurian Suciu, *Maximum subspaces related to A -contractions and quasinormal operators*, Journal of the Korean Mathematical Society 45, No.1, pp. 205-219, 2008.
45. Laurian Suciu, *Ergodic properties for regular A -contractions*, Integral Equations and Operator Theory 56, 2, pp. 285-299, 2006. <https://doi.org/10.1007/s00020-006-1417-5>

C2 - Lucrări indexate BDI

2006-2015

1. Michael Lin and Laurian Suciu, *Poisson's equation for mean ergodic operators*, Contemporary Mathematics Vol. 636, pp. 141-148, 2015.
2. Laurian Suciu, *Canonical decompositions induced by A -contractions*, Note di Matematica vol. 28, issue 2, pp. 187-202, 2008. DOI :10.1285/i15900932v28n2p187
3. Laurian Suciu and Nicolae Suciu, *Inequalities for strict bicontractions*, Annals of the University of Bucharest LIX, pp. 3-15, 2010. http://fmi.unibuc.ro/ro/anale/matematica/1_2010/suciu.pdf
4. Laurian Suciu, *Some invariant subspaces for A -contractions and applications*, Extracta Mathematicae 21 (3), pp. 221-247, 2006. <https://www.eweb.unex.es/eweb/extracta/Vol-21-3/21J3Suciu.pdf>
5. Laurian Suciu and Nicolae Suciu, *Harnack domination for contractions and related intertwining operators*, Acta Sci. Math. (Szeged) 72, pp. 319-343, 2006.
6. Laurian Suciu, *On the ergodic A -contractions*, Analele Univ. de Vest din Timișoara, Ser. Mat.-Inf. 2, pp. 115-136, 2004.
7. Laurian Suciu, *Orthogonal decomposition induced by generalized contractions*, Acta Sci. Math. (Szeged) 70, pp. 751-765, 2004.



8. Laurian Suciu and Nicolae Suciu, *On the asymptotic limit of a bicontraction*, Theta Series in Advanced Mathematics, pp. 117-135, 2012.
9. Laurian Suciu and Nicolae Suciu, *Selection of semispectral measures for bicontractions*, Theta Series in Advanced Mathematics, pp. 1-21, 2010.
10. Laurian Suciu and Nicolae Suciu, *Harnack ordering for pairs of commuting contractions*, Proceedings of the 6th Congress of Romanian Mathematicians, Bucharest 2007, Editura Academiei Române, vol. 1, pp. 381-398, 2009.
11. Gilles Cassier and Laurian Suciu, *Mapping theorems and similarity to contractions for classes of A -contractions*, Theta Series in Advanced Mathematics, pp. 39-58, 2008.
12. Laurian Suciu, *Block representation for A -contractions*, Theta Series in Advanced Mathematics, pp. 201-216, 2008.
13. Laurian Suciu, *Ergodic properties and saturation for A -contractions*, Theta Series in Advanced Mathematics, pp. 225-242, 2006.

D. Lucrări publicate în reviste și volume de conferințe cu referenți (neindexate)

D2- Lucrări publicate în volume de conferințe cu referenți

1. Laurian Suciu, *Invertible A -contractions and applications*, Proceedings of the 9th National Conference of the Romanian Mathematical Society, Lugoj 6-May 2005, Ed. UVT, pp. 272-290, 2005.
2. Laurian Suciu, *Sur les contractions quasi-normales*, Proceedings of the National Conf. of Math. Anal. and Appl., Timișoara 2000, pp. 395-404, 2000.

Granturi/proiecte câștigate prin competiție

1. Contract de cercetare științifică sub egida LEA Franco-Roumain Math-Mode între Laboratoire de Mathématiques de l'Université Paris-Sud și Institutul de Matematică "Simion Stoilow" al Academiei Române, obținut prin competiție, cu titlul: Proiect de recherche en analyse fonctionnelle, 2015.
2. Contract de cercetare prin CNRS, Franța la Laboratoire Paul Painlevé, Universitatea Lille 1, 2016.
3. Some Topics in Hilbert Space Operators Research in Pairs, Centre International de Recherches Mathématiques (CIRM), Marseille, France, 2019.
4. Grant cercetare LBUS-IRG-2015-01: Titlul: Analiza Harnack operatorială și proprietăți ergodice pentru medii de operatori. Grant intern ULBS, 2015.
5. Grant cercetare LBUS-IRG-2016-02: Titlul: Dominare de tip Shmul'yan pentru contracții pe spații Hilbert și teoreme de dilatare pentru operatori concavi. Grant intern ULBS, 2016.
6. Grant cercetare LBUS-IRG-2017-03: Titlul: Teoreme de lifting pentru operatori cu puteri marginite și ergodicitate. Grant intern ULBS, 2017.
7. Grant cercetare LBUS-IRG-2018-03: Titlul: Teoreme de lifting și dualul Cauchy pentru operatori marginiți pe spații Hilbert. Grant intern ULBS, 2018.
8. Grant cercetare LBUS-IRG-2019-05: Titlul: Descompuneri ortogonale pentru diverse clase de operatori liniari și marginiți pe spații Hilbert. Grant intern ULBS, 2019.
9. Grant cercetare LBUS-IRG-2020-06: Titlul: Dilatări expansive de operatori pe spații Hilbert. Grant intern ULBS, 2020.
10. Grant cercetare LBUS-IRG-2021-07: Titlul: Extensions of operators and perturbations of the



maximal function related to the intertwining expansion problem for contractions. Grant intern ULBS, 2021.

11. Grant cercetare LBUS-IRG-2022-08: Titlul: Asymptotic properties for compressions of two-isometries and Wold decompositions. Grant intern ULBS, 2022.
12. Grant cercetare LBUS-IRG-2023: Titlul: Brownian extensions and liftings for bounded linear operators on Hilbert spaces. Grant intern ULBS, 2023.
13. Grant cercetare LBUS-IRG-2024: Titlul: Brownian-type operators and their relation with dilation theory. Grant intern ULBS, 2024.

Data:
28.04.2026

Semnătura:
Prof. univ. dr. *habil.* Suciu Laurian

A handwritten signature in blue ink, consisting of stylized cursive letters, likely representing the name 'Suciu Laurian'.