Curriculum Vitae

Daniel Beltiţă

Full name: Daniel-Costin BELTIŢĂ
Citizenship: Romanian
Affiliation: Institute of Mathematics "Simion Stoilow" of the Romanian Academy
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 Bucharest, Romania
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Education
- 2005: Ph.D. in Mathematics/Mathematical Analysis at the Univ. of Bucharest, with the Ph.D. thesis *Spectral Theory for Lie Algebra Representations* (supervisor Prof. Dr. I. Colojoară).

Research interests
- Structure and representation theory of infinite-dimensional Lie groups and algebras
- Harmonic analysis on nilpotent Lie groups
- Functional analysis and the theory of operator algebras

PhD supervision
- 2010: accreditation to supervise PhD theses in Mathematics in Romania
- PhD student: Mihai Nicolae, with his thesis "Moments for Lie group representations" defended on 27.10.2014.

Visiting positions
- Université de Haute Alsace, March 2015, Mulhouse, France.
- Technische Universität Darmstadt, November, 2008, Darmstadt, Germany.
- École Politechnique Fédérale de Lausanne, June, 2004, Lausanne, Switzerland.
- École Politechnique Fédérale de Lausanne, November, 2003, Lausanne, Switzerland.

Research visits
- Uniwersytet w Białymstoky, 19 – 25 August 2019, Białystok, Poland.
- Uniwersytet w Białymstoky, 13 – 19 May 2019, Białystok, Poland.
- Institut Supérieur des Sciences Appliquées et de Technologie de Sousse, 17 – 24 March 2018, Sousse, Tunisia.
- Uniwersytet w Białymstoky, 17 – 24 September 2017, Białystok, Poland.
- Jawaharlal Nehru Centre for Advanced Scientific Research, 1–12 December 2016, Bengaluru, India.
- Uniwersytet w Białymstoky, October 30 – November 5, 2016, Biaystok, Poland.
- Uniwersytet w Białymstoky, October 3–15, 2015, Białystok, Poland.
- Friedrich-Alexander-Universität Erlangen-Nürnberg, Emmy-Noether-Zentrum, November 18–29, 2014, Erlangen, Germany.

- Friedrich-Alexander-Universität Erlangen-Nürnberg, Emmy-Noether-Zentrum, May 2–11, 2012, Erlangen, Germany.
- Uniwersytet w Białymstoky, June 5–12, 2011, Białystok, Poland.
- Universidad de Zaragoza, October 21–27, 2007, Zaragoza, Spain.
- Technische Universität Darmstadt, April 22–29, 2007, Darmstadt, Germany.
- Universidad de Zaragoza, September 26 – October 8, 2005, Zaragoza, Spain.
- Technische Universität Darmstadt, May 27 – July 10, 2001, Darmstadt, Germany.

Participation in professional meetings

- International Conference on Applied and Pure Mathematics (ICAPM 2019), 31 October – 3 November 2019, Iaşi, Romania.
- XXXVIII Workshop on Geometric Methods in Physics, 30 June – 6 July 2019, Białowieża, Poland.
- 15th Romanian-Finnish Analysis Seminar (RomFin2019), 10 – 12 June 2019, Turku, Finland.
- XIV-ème colloque franco-roumain de mathématiques appliquées, 27 – 31 August 2018, Bordeaux, France.
- XXXVII Workshop on Geometric Methods in Physics, 1 – 7 July 2018, Białowieża, Poland.
- GAP XVI - Lie theory and applications to mathematical physics, 29 May – 2 June 2018, University of the West, Timişoara, Romania.
- Noncommutative Geometry and Higher Structures, 11 – 15 September 2017, Würzburg, Germany.
- XXXVI Workshop on Geometric Methods in Physics, 2 – 8 July 2017, Białowieża, Poland.
- Congreso Bienal de la Real Sociedad Matemática Española, 30 January – 3 February 2017, Facultad de Educación, Universidad de Zaragoza, Spain.
- Recent Advances in Operator Theory and Operator Algebras, 13–22 December 2016, Statistics and Mathematics Unit, Indian Statistical Institute, Bengaluru, India.
- Discussion Meeting on Linear Analysis of the Indian Academy of Sciences, 27 November – 1 December 2016, Orange County, Kodagu, India.
- 50th Seminar Sophus Lie, 25 September – 1 October 2016, Będlewo, Poland.
- 5th Summer Workshop on Operator Theory, 5 – 9 July 2016, Krakw, Poland.
- XXXV Workshop on Geometric Methods in Physics, 26 June – 2 July 2016, Białowieża, Poland.
- The 49th Seminar Sophus Lie, September 22–25, 2015. Friedrich-Alexander-Universität Erlangen-Nürnberg, Emmy-Noether-Zentrum, Erlangen, Germany.
- XXXIV Workshop on Geometric Methods in Physics, June 28 – July 04, 2015, Białowieża, Poland.
- Conference on Geometric Analysis in honor of the 65th birthday of Tudor Ratiu, June 12–13, 2015, Centre Interfacultaire Bernoulli, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland.
- Workshop Classic and Stochastic Geometric Mechanics, June 8–11, 2015, Centre Interfacultaire Bernoulli, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland.
- Rencontre Algebre Metz Mulhouse (RAMM), March 12, 2015, Laboratoire de Mathématiques, Informatique et Applications, Université de Haute-Alsace, Mulhouse, France.

- Infinite-dimensional Structures in Higher Geometry and Representation Theory, February 16 – 20, 2015, Center for Mathematical Physics, Universität Hamburg, Germany.
- The 25th International Conference on Operator Theory, June 30 – July 5, 2014, University of the West, Timişoara, Romania.
- Géométrie et dynamiques des espaces de Finsler, June 16–20, 2014, Centre International de Rencontres Mathématiques, Luminy, Marseille, France.
- Segunda Escuela sobre Análisis Funcional y Geometría, November 18–22, 2013, Instituto Argentino de Matemática "Alberto P. Calderón" (IAM-CONICET), Buenos Aires, Argentina.
- Groups, Nonassociative Algebras and Combinatorics, September 30 – October 4, 2013, Centre International de Rencontres Mathmatiques, Luminy, Marseille, France.
- Representations of Lie Groups and Supergroups, March 10–16, 2013, Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach, Germany.
- Seminar on Harmonic Analysis, September 21–22, 2012, Institute of Mathematics of the Romanian Academy, Bucharest, Romania.
- Harmonic Analysis, Convolution Algebras, and Special Functions, September 10-14, 2012, Technische Universität München, Germany.
- The 24th International Conference on Operator Theory, July 2–7, 2012, University of the West, Timişoara, Romania.
- XXXI Workshop on Geometric Methods in Physics, June 24–30, 2012, Białowieża, Poland.
- Branching Problems for Unitary Representations, July 25–29, 2011, Max-Plank-Institut für Mathematik, Bonn, Germany
- Infinite Dimensional Lie Theory, November 14–20, 2010, Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach, Germany.
- Representations of Lie Groups and Algebraic Groups, September 14–17, 2010, Friedrich-Alexander-Unversität Erlangen-Nürnberg, Emmy-Noether-Zentrum, Erlangen, Germany.
- XXIX Workshop on Geometric Methods in Physics, June 27 – July 3, 2010, Białowieża, Poland.
- Analiză Funcţională şi Teoria Operatorilor. In honor of Ion Colojoară, February 6, 2010, University of Bucharest —-Faculty of Mathematics and Computer Science, Bucharest, Romania.
- XXVIII Workshop on Geometric Methods in Physics, June 28 – July 4, 2009, Białowieża, Poland.
- The 60th Anniversary of The Institute of Mathematics of the Romanian Academy, June 25–27, 2009, Institute of Mathematics of the Romanian Academy, Bucharest, Romania.
- Workshop on Infinite-Dimensional Lie Groups and Related Functional Analysis, November 6–8, 2008, Universität Paderborn - Institut für Mathematik, Paderborn, Germany.
- Workshop on Operator Algebras and Conformal Field Theory, September 8–19, 2008, The Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria.
- Research Group on Banach Lie-Poisson Spaces and Integrable Systems, August 5–10, 2008, The Mathematical Research and Conference Center of the Institute of Mathematics of the Polish Academy of Sciences, Będlewo, Poland.
- Seminar Sophus Lie, July 4–5, 2008, Babes-Bolyai University, Cluj-Napoca, Romania.
- Conference in Analysis and Geometry in Several Complex Variables, June 24–28, 2008, Institute of Mathematics of the Romanian Academy, Bucharest, Romania.

- Workshop on Infinite Dimensional Lie Theory, December 10–16, 2006, Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach, Germany.
- The 21st International Conference on Operator Theory, June 29 – July 4, 2006, University of the West, Timişoara, Romania.
- The 6th Operator Algebras International Conference: Operator Algebras and Mathematical Physics-3, August 10–17, 2005, Bucharest, Romania.
- Summer School and Conference on Poisson Geometry, July 4–22, 2005, The Abdus Salam International Centre for Theoretical Physics, Trieste, Italy.
- The 20th International Conference on Operator Theory, June 30 – July 5, 2004, University of the West, Timişoara, Romania.
- Workshop on Finite and Infinite Dimensional Complex Geometry and Representation Theory, February 1–7, 2004, Mathematisches Forschungsinstitut Oberwolfach, Oberwolfach, Germany.
- The 2nd Operator Algebras and Mathematical Physics Conference, June 26 – July 4, 2003, Sinaia, Romania.
- Poisson Geometry, Deformation Quantisation and Group Representations, July 13–22, 2003, Université Libre de Bruxelles, Brussels, Belgium.
- The 19th International Conference on Operator Theory, June 27 – July 2, 2002, University of the West, Timişoara, Romania.
- Seminar Sophus Lie, December 7-8, 2001, Humboldt-Universität zu Berlin, Berlin, Germany.
- Seminar Sophus Lie: "Workshop on Lie Groups and Lie Algebras", September 4–15, 2000, The Mathematical Research and Conference Center of the Institute of Mathematics of the Polish Academy of Sciences, Będlewo, Poland.
- The 18th International Conference on Operator Theory, June 27 – July 1, 2000, University of the West, Timişoara, Romania.
- The 17th International Conference on Operator Theory, June 23–26, 1998, University of the West, Timişoara, Romania.
- The 16th International Conference on Operator Theory, July 2–10, 1996, University of the West, Timişoara, Romania.

Administration and service:

- Member of the editorial board of the Annals of the Alexandru Ioan Cuza University - Mathematics, the journal of "Alexandru Ioan Cuza" University from Iasi, Romania
- Director of the Mathematics Department of "Şcoala Normală Superioară" in Bucharest, Romania (2012–2014).
- Member of the Scientific Council of the Institute of Mathematics of the Romanian Academy (since 2009).
- Member of the research group Geometry and Physics in the Department of Theoretical Physics, National Institute of Physics and Nuclear Engineering, Bucharest, Romania. (http://events.theory.nipne.ro/gap/)
- Organisation of seminars and workgroups held on a weekly basis at the Institute of Mathematics of the Romanian Academy.
- Co-organizer of the international Seminar on Harmonic Analysis, September 21–22, 2012, Institute of Mathematics of the Romanian Academy, Bucharest, Romania
- Member of the Advisory Committee of the Workshops on Geometric Methods in Physics held on a yearly basis in Białowieża, Poland. (http://wgmp.uwb.edu.pl).

Languages:

English (well), French (basic), German (read), Spanish (read), Russian (read)

Publications
- 2 books
- 74 published papers and 4 preprints
- 2 books translated from English into Romanian
  (*see the full list of publications below*)

Co-authors:
- Ingrid Beltiţă (Institute of Mathematics of the Romanian Academy, Romania)
- Benjamin Cahen (Université de Lorraine, Metz, France)
- José E. Galé (Universidad de Zaragoza, Spain)
- Tomasz Goliński (University of Białystok, Poland)
- Hendrik Grundling (University of New South Wales, Australia)
- Grzegorz Jakimowicz (University of Białystok, Poland)
- Jean Ludwig (Université de Lorraine, Metz, France)
- Marius Măntoiu (Universidad de Chile, Santiago de Chile, Chile)
- Karl-Hermann Neeb (Universität Erlangen-Nürnberg, Germany)
- Mihai Nicolae (University of Ploieşti, Romania)
- Anatol Odzijewicz (University of Białystok, Poland)
- Mihai Pascu (University of Ploieşti and Institute of Mathematics of the Romanian Academy, Romania)
- Sasmita Patnaik (Indian Institute of Science, Education, and Research, Bhopal, India)
- Fernand Pelletier (Université de Savoie–Mont Blanc, France)
- Bebe Prunaru (Institute of Mathematics of the Romanian Academy, Romania)
- Tudor S. Ratiu (École Polytechnique Fédérale de Lausanne, Switzerland)
- Mihai Şabac (University of Bucharest, Romania)
- Alice Barbara Tumpach (Université de Lille 1, France)
- Gary Weiss (University of Cincinnati, USA)
- Amel Zergane (Université de Sousse, Tunisia)

Honors, Awards, and Funding for Research Projects:
- Member of the research team of the project "Teoria de operadores y geometria en análisis", grant MTM2013-42105, DGI-FEDER, at Universidad de Zaragoza, awarded by the Ministry of Education and Science of Spain for 2013–2016.
- Principal Investigator in the project "Operator calculus for Lie group representations, with applications to PDE and quantum physics", grant PN-II-ID-PCE-2011-3-0131, awarded by the Ministry of Education and Research of Romania for 2012–2016.
- Principal Investigator in the project "Geometric structures in functional analysis - Quantization of infinite-dimensional manifolds", CNCSIS grant PNII - Programme PCE2008 'Idei' (code 1194), awarded by the Ministry of Education and Research of Romania for 2009–2011.
- Member of the research team of the project "Analisis geometrico, álgebras de operadores y aplicaciones", grant MTM2010-16679, DGI-FEDER, awarded by the Ministry of Education and Science of Spain for 2010–2013.

- Member of the research team of the project "Analisis geometrico, teoria de operadores y aplicaciones", grant MTM2007-61446 awarded by the Ministry of Education and Science of Spain for 2007–2010.
- Member of the research team of the project "Operator techniques, functional analysis, complex analysis, and stochastic processes", grant 2-CEx 06-D11-34/25.07.2006 awarded by the Ministry of Education and Research of Romania for 2006–2008.
- Member of the research team of the project "Contact, complex and quaternionic geometry on conformal and Riemannian manifolds", grant 2-CEx 06-D11-22/25.07.2006 awarded by the Ministry of Education and Research of Romania for 2006–2008.
- Member of the research team of the project in the frame of the program SCOPES supporting the cooperation IMAR (Bucharest) - EPFL (Lausanne), grant no. IB7320-110721/1 awarded by the Federal Government of Switzerland for 2005–2008.
- Member of the research team of the project in the frame of the program SCOPES supporting the cooperation IMAR (Bucharest) - EPFL (Lausanne), grant no. 7IP062615 awarded by the Federal Government of Switzerland for 2001–2004.
- Member of the research team of the project "Spectral theory, representation theory, and interpolation problems for operator families", grant CNCSIS GR202/2006 (code 813) awarded by the Ministry of Education and Research of Romania for 2006–2008.
- Member of the research team of the project "Operator methods, functional and complex analysis, and applications", grant 2-CEx 05-D11-23/05.10.2005 awarded by the Ministry of Education and Research of Romania for 2005–2007.
- Member of the research team of the project "Mathematical modeling. Abstract results and applications", grant CERES 4-187/2004 awarded by the Ministry of Education and Research of Romania for 2004–2005.
- Member of the research team of the project "Modern methods of functional and complex analysis with applications to quantum systems and external fields", grant CERES 3-28/2003 awarded by the Ministry of Education and Research of Romania for 2003–2004.
- Member of the research team of the project "Multivariable Operator Theory and Applications", grant CNCSIS nr. 40224/2003 (code 1620), awarded by the Ministry of Education and Research of Romania for 2003–2004.
- Member of the research team of the project "European Integration of the Romanian Mathematical Research Activity", grant ICA1-CT-2000-70022 awarded by the European Commission for 2000–2004.
- The award "Simion Stoilow" of the Romanian Academy in the year 2001 for the monograph by D. Belti\c{t}\u{a} \c{s}i M. \c{S}abac, *Lie Algebras of Bounded Operators*, Operator Theory: Advances and Applications, vol. 120, Birkhäuser Verlag, Basel-Boston-Berlin, 2001. viii+219 pp.

Other scientific activities

- Lectures in scientific seminars.
- Book reviews for MathSciNet - Mathematical Reviews, Zentralblatt für Mathematik, SIAM Review, Journal of Operator Theory, and Revue Roumaine des Mathematiques Pures et Appliquées.
- Peer reviews on manuscripts submitted to various journals, including Memoirs of the American Mathematical Society, Proceedings of the American Mathematical Society,

Bulletin/Journal/Proceedings of the London Mathematical Society, Journal of Functional Analysis, Journal of Operator Theory, Linear Algebra and Its Applications, Complex Analysis and Operator Theory, Studia Mathematica, Journal of Mathematical Analysis and Applications, Journal of Lie Theory, Differential Geometry and Its Applications, Forum Mathematicum, Manuscripta Mathematica, Mathematische Zeitschrift, Journal of Geometry and Physics, Journal of Mathematical Physics, Glasgow Mathematical Journal, Intenational Journal of Mathematics, Central European Journal of Mathematics.

List of publications

Books

- D. BELTIŢĂ, *Smooth Homogeneous Structures in Operator Theory.* Monographs and Surveys in Pure and Applied Mathematics, vol. 137, Chapman & Hall/CRC Press, Boca Raton-London-New York-Singapore, 2006. xvi+302 pp.
- D. BELTIŢĂ, M. ŞABAC, *Lie Algebras of Bounded Operators.* Operator Theory: Advances and Applications, vol. 120, Birkhäuser Verlag, Basel-Boston-Berlin, 2001. viii+ 219 pp.

FULL LIST OF PAPERS

[1] I. BELTIŢĂ, D. BELTIŢĂ, On the isomorphism problem for C^*-algebras of nilpotent Lie groups. *J. Topol. Anal.* (to appear; DOI: 10.1142/S1793525320500296).

[2] D. BELTIŢĂ, H. GRUNDLING, K.-H. NEEB, Covariant representations for possibly singular actions on C^*-algebras. *Dissertationes Math.* (to appear; DOI: 10.4064/dm793-6-2019)

[3] D. BELTIŢĂ, F. PELLETIER, A. ZERGANE, On the smoothness of some quotients of Banach-Lie groups. *Differential Geom. Appl.* **67** (2019), 101556, 22 pp.

[4] D. BELTIŢĂ, T. GOLIŃSKI, G. JAKIMOWICZ, F. PELLETIER, Banach-Lie groupoids and generalized inversion. *J. Funct. Anal.* **276** (2019), no. 5, 1528–1574.

[5] I. BELTIŢĂ, D. BELTIŢĂ, J.E. GALÉ, Transference for Banach space representations of nilpotent Lie groups. Part 1. Irreducible representations. *Proc. Amer. Math. Soc.* **146** (2018), no. 12, 5065–5075.

[6] D. BELTIŢĂ, T. GOLIŃSKI, A.-B. TUMPACH, Queer Poisson brackets. *J. Geom. Phys.* **132** (2018), 358–362.

[7] I. BELTIŢĂ, D. BELTIŢĂ C^*-dynamical systems of solvable Lie groups. *Transform. Groups* **23** (2018), no. 3, 589–629.

[8] I. BELTIŢĂ, D. BELTIŢĂ, Quasidiagonality of C^*-algebras of solvable Lie groups. *Integral Equations Operator Theory* **90** (2018), no. 1, Paper No. 5, 21 pp.

[9] I. BELTIŢĂ, D. BELTIŢĂ, Nonlinear oblique projections. *Linear Algebra Appl.* **533** (2017), 451–467.

[10] D. BELTIŢĂ, A. ZERGANE, Amenability and representation theory of pro-Lie groups. *Math. Z.* **286** (2017), no. 1–2, 701–722.

[11] I. BELTIŢĂ, D. BELTIŢĂ, J. LUDWIG, Fourier transforms of C^*-algebras of nilpotent Lie groups. *Int. Math. Res. Not. IMRN* (2017), no. 3, 677–714.

[12] I. BELTIŢĂ, D. BELTIŢĂ, M. MĂNTOIU, Symbol calculus of square-integrable operator-valued maps. *Rocky Mountain J. Math.* **46** (2016), no. 6, 1795–1851.

[13] I. BELTIŢĂ, D. BELTIŢĂ, On C^*-algebras of exponential solvable Lie groups and their real ranks. *J. Math. Anal. Appl.* **437** (2016), no. 1, 51-58.

[14] I. BELTIŢĂ, D. BELTIŢĂ, M. MĂNTOIU, On Wigner transforms in infinite dimensions. *J. Math. Phys.* **57** (2016), no. 2, 021705, 13 pp.

[15] D. BELTIŢĂ, S. PATNAIK, G. WEISS, Cartan subalgebras of operator ideals. *Indiana Univ. Math. J.* **65** (2016), no. 1, 1-37.

[16] I. Beltiţă, D. Beltiţă, Coadjoint orbits of stepwise square integrable representations. *Proc. Amer. Math. Soc.* **144** (2016), no. 3, 13431350

[17] D. Beltiţă, K.-H. Neeb, Nonlinear completely positive maps and dilation theory for real involutive algebras. *Integral Equations Operator Theory* **83** (2015), no. 4, 517–562.

[18] I. Beltiţă, D. Beltiţă, Inverse-closed algebras of integral operators on locally compact groups. *Ann. Henri Poincaré* **16** (2015), no. 5, 1283–1306.

[19] I. Beltiţă, D. Beltiţă, M. Pascu, Weyl-Pedersen calculus for some semidirect products of nilpotent Lie groups. *Differential Geom. Appl.* **40** (2015), 278–289.

[20] D. Beltiţă, J.E. Galé, Coherent state map quantization in a Hermitian-like setting. *J. Geom. Phys.* **92** (2015), 100-118.

[21] I. Beltiţă, D. Beltiţă, Boundedness for Weyl-Pedersen calculus on flat coadjoint orbits. *Int. Math. Res. Not. IMRN* **2015**, no. 3, 787–816.

[22] I. Beltiţă, D. Beltiţă, On Kirillov's lemma for nilpotent Lie algebras. *J. Algebra* **427** (2015), 85–103.

[23] I. Beltiţă, D. Beltiţă, Faithful representations of infinite-dimensional nilpotent Lie algebras. *Forum Math.* **27** (2015), no. 1, 255–267.

[24] D. Beltiţă, M. Nicolae, Moment convexity of solvable locally compact groups. *J. Lie Theory* **25** (2015), no. 3, 733–751.

[25] D. Beltiţă, M. Nicolae, On universal enveloping algebras in a topological setting. *Studia Math.* **230** (2015), no. 1, 1–29.

[26] D. Beltiţă, B. Cahen, Contractions of Lie algebras with 2-dimensional generic coadjoint orbits. *Linear Algebra Appl.* **46** (2015), 41–63.

[27] D. Beltiţă, J.E. Galé, Linear connections for reproducing kernels on vector bundles. *Math. Z.* **277** (2014), no. 1–2, 29–62.

[28] I. Beltiţă, D. Beltiţă, On the differentiable vectors for contragredient representations. *C. R. Math. Acad. Sci. Paris* **351** (2013), no. 13–14, 513–516.

[29] I. Beltiţă, D. Beltiţă, Algebras of symbols associated with the Weyl calculus for Lie group representations. *Monatsh. Math.* **167** (2012), no. 1, 13–33.

[30] D. Beltiţă, K.-H. Neeb, Schur-Weyl Theory for C^*-algebras. *Math. Nachr.* **285** (2012), no. 10, 1170–1198.

[31] I. Beltiţă, D. Beltiţă, On differentiability of vectors in Lie group representations. *J. Lie Theory* **21** (2011), no. 4, 771–785.

[32] I. Beltiţă, D. Beltiţă, Modulation spaces of symbols for representations of nilpotent Lie groups. *J. Fourier Anal. Appl.* **17** (2011), no. 2, 290–319.

[33] I. Beltiţă, D. Beltiţă, Continuity of magnetic Weyl calculus. *J. Funct. Anal.* **260** (2011), no. 7, 1944–1968.

[34] D. Beltiţă, J.E. Galé, Universal objects in categories of reproducing kernels. *Rev. Mat. Iberoam.* **27** (2011), no. 1, 123–179.

[35] I. Beltiţă, D. Beltiţă, Smooth vectors and Weyl-Pedersen calculus for representations of nilpotent Lie groups. *Ann. Univ. Buchar. Math. Ser.* **1 (LIX)** (2010), no. 1, 17–46.

[36] D. Beltiţă, K.-H. Neeb, Geometric characterization of hermitian algebras with continuous inversion. *Bull. Aust. Math. Soc.* **81** (2010), no. 1, 96–113.

[37] D. Beltiţă, Lie theoretic significance of the measure topologies associated with a finite trace. *Forum Math.* **22** (2010), no. 2, 241–253.

[38] I. Beltiţă, D. Beltiţă, Uncertainty principles for magnetic structures on certain coadjoint orbits. *J. Geom. Phys.* **60** (2010), no. 1, 81–95.

[39] D. Beltiţă, J.E. Galé, On complex infinite-dimensional Grassmann manifolds. *Complex Anal. Oper. Theory* **3** (2009), no. 4, 739–758.

[40] D. Beltiţă, Iwasawa decompositions of some infinite-dimensional Lie groups. *Trans. Amer. Math. Soc.* **361** (2009), no. 12, 6613–6644.

[41] I. Beltiţă, D. Beltiţă, Magnetic pseudo-differential Weyl calculus on nilpotent Lie groups. *Ann. Global Anal. Geom.* **36** (2009), no. 3, 293–322.

[42] D. BELTIŢĂ, J.E. GALÉ, Holomorphic geometric models for representations of C^*-algebras. *J. Funct. Anal.* **255** (2008), no. 10, 2888–2932.

[43] D. BELTIŢĂ, K.-H. NEEB, A nonsmooth continuous unitary representation of a Banach-Lie group. *J. Lie Theory* **18** (2008), no. 4, 933–936.

[44] D. BELTIŢĂ, K.-H. NEEB, Finite-dimensional Lie subalgebras of algebras with continuous inversion. *Studia Math.* **185** (2008), no. 3, 249–262.

[45] D. BELTIŢĂ, T.S. RATIU, A.B. TUMPACH, The restricted Grassmannian, Banach Lie-Poisson spaces, and coadjoint orbits. *J. Funct. Anal.* **247** (2007), no. 1, 138–168.

[46] D. BELTIŢĂ, B. PRUNARU, Amenability, completely bounded projections, dynamical systems and smooth orbits. *Integral Equations Operator Theory* **57** (2007), no. 1, 1–17.

[47] D. BELTIŢĂ, T.S. RATIU, Geometric representation theory for unitary groups of operator algebras. *Adv. Math.* **208** (2007), no. 1, 299–317.

[48] D. BELTIŢĂ, Integrability of analytic almost complex structures on Banach manifolds. *Ann. Global Anal. Geom.* **28** (2005), no. 1, 59–73.

[49] D. BELTIŢĂ, T.S. RATIU, Symplectic leaves in real Banach Lie-Poisson spaces. *Geom. Funct. Anal. (GAFA)* **15** (2005), no. 4, 753–779.

[50] D. BELTIŢĂ, M. ŞABAC, Polynomial sequences of bounded operators. *J. Funct. Anal.* **209** (2004), no. 1, 101–136.

[51] D. BELTIŢĂ, Asymptotic products and enlargibility of Banach-Lie algebras. *J. Lie Theory* **14** (2004), no. 1, 215–226.

[52] D. BELTIŢĂ, Complex homogeneous spaces of pseudo-restricted groups. *Math. Res. Lett.* **10** (2003), no. 4, 459–467.

[53] D. BELTIŢĂ, Spectra for solvable Lie algebras of bundle endomorphisms. *Math. Ann.* **324** (2002), no. 2, 405–429.

[54] D. BELTIŢĂ, Analytic joint spectral radius in a solvable Lie algebra of operators. *Studia Math.* **144** (2001), 153–167.

[55] D. BELTIŢĂ, Spectral conditions for the nilpotency of Lie algebras. *J. Operator Theory* **46** (2001), no. 3, suppl., 593–603.

[56] D. BELTIŢĂ, Spectrum for a solvable Lie algebra of operators. *Studia Math.* **135** (1999), 163–178.

[57] D. BELTIŢĂ, M. ŞABAC, An asymptotic formula for the commutators. *J. Funct. Anal.* **153** (1998), 262–275.

[58] D. BELTIŢĂ, On certain Lie algebras of normal operators. *Rev. Roumaine Math. Pures Appl.* **43** (1998), 653–658.

[59] D. BELTIŢĂ, Joint invariant subspaces for some commuting tuples of bounded linear operators. *Rev. Roumaine Math. Pures Appl.* **41** (1996), 583–589.

Papers published in peer-reviewed volumes

[60] D. BELTIŢĂ, A. ZERGANE, Coadjoint orbits in representation theory of pro-Lie groups. In: P. Kielanowski, A. Odzijewicz, E. Previato (eds.), *Geometric Methods in Physics*. Workshop and Summer School, Białowieża, Poland, 2017. Selected papers. Birkhäuser/Springer, Cham, 2019, pp. 281–287.

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