

Scientific CV

ALICE FIALOWSKI

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Nationality: Hungarian
Languages: I am fluent in Hungarian, Russian, English, and German.

Education

- 2012 Doctor of the Hungarian Academy of Sciences. Thesis title: “Algebraic Deformation Theory”.
- 1983 Academic degree of “Candidate of Mathematical Sciences” in Russian from Moscow State University, Moscow/USSR. Thesis title: “About cohomology and deformations of infinite dimensional nilpotent Lie algebras.” Thesis advisor A.A. Kirillov.
- 1977 Ph.D. in Mathematics from Eötvös Loránd University, Budapest, Hungary. Thesis title: “Generalization of basic theorems of abstract harmonic analysis - Plancherel-Godement and Bochner-Godement Theorem.”
- 1974 Diploma in Mathematics from Eötvös Loránd University, Budapest, Hungary.

Research area: Lie theory, cohomology, deformation theory, applications to mathematical physics

Academic Positions (since 1996)

- 2021- Professor at Eötvös Loránd University, Budapest, Faculty of Informatics
- 2014-2020 Professor at the University of Pécs, Institute of Mathematics and Informatics
- 2012 Visiting Scientist, Bonn University, Germany (one month)
- 2010 Visiting Scientist, Max-Planck-Institut für Mathematik, Bonn, Germany (one month)
- 2009 Visiting Scientist, Max-Planck-Institut für Mathematik, Bonn, Germany (one month)
Visiting researcher, Alfréd Rényi Institute of Mathematics, Budapest (5 months)
- 2008 Visiting Scientist, ETH, Zürich, Switzerland (one month)
Visiting researcher, Alfréd Rényi Institute of Mathematics, Budapest (5 months)
Visiting Scientist, Indian Statistical Institute and Chennai University India (one month)
- 2007 Visiting Scientist, Max-Planck-Institut für Mathematik, Bonn, Germany (one month)
Visiting Scientist, Indian Statistical Institute, Kolkata, India (one month)
- 2006 Visiting Scientist, IHES, Paris, France (one month)
- 2005 Visiting Scientist, Max-Planck-Institut für Mathematik, Bonn, Germany (one month)
Visiting Scientist, Indian Statistical Institute, Kolkata, India (one month)
- 2004 Visiting Scientist, Erwin Schrödinger Institute of Mathematical Physics, Vienna (one month).

- 2003 Visiting Scientist, Max–Planck–Insitut für Mathematik, Bonn, Germany (one month).
 2002 Visiting Scientist, Max–Planck–Insitut für Mathematik, Bonn, Germany (one month).
 2001 Visiting Scientist, Max–Planck–Insitut für Mathematik, Bonn, Germany (one month).
 2000 Visiting Scientist, Schrödinger Institute, Vienna, Austria (one month).
 1997 Visiting Scientist, Max–Planck–Insitut für Mathematik, Bonn, Germany (one month).
 1996 Visiting Scientist, Schrödinger Institute, Vienna, Austria (June).
 1994–2014 Associate Professor, Eötvös Loránd University, Budapest, Hungary.

Invited Lectures (since 2005)

- 2005 Diagram and Cellular Algebras, Oxford, England
 Intern. Conference on Algebra, Debrecen
 Indian Statistical Insitute, Kolkata, India
- 2006 Deformations and Contractions in Mathematics and Physics, Oberwolfach Workshop
 Tel Aviv University, Israel
 Hebrew University, Jerusalem, Israel
 Operads Conference, Strasbourg, France
- 2007 Faddeev Intern. Algebra Conf., St. Petersburg, Russia
 Seminar Sophus Lie, Bielefeld, Germany
 Algebraic Aspects in Geometry, Bedlewo, Poland
 Higher Structures in Geometry and Physics, Paris, France
- 2008 Chennai University, India
 Sophus Lie Seminar XXXV, Budapest
 Alfréd Rényi Institute of Mathematics, Budapest
 Sophus Lie Seminar XXXVI, Kolozsvár
 Leicester University, Conference, England
- 2009 AGMP Meeting, Bedlewo, Poland
 Operad Conference, Lumini, France
 Algebra Symposium, Kolozsvár, Romania
 Istanbul University, Turkey
 Alfréd Rényi Insitute of Mathematics, Budapest
- 2010 Seminar Sophus Lie, Mulhouse, France
 Sfax University, Monastir, Tunisia
- 2011 Infinite Dimensional Lie Theory Conference, Tehran, Iran
 Sophus Lie Seminar, Erlangen, Germany
 Mathematical Physics Conference (AGMP), Mulhouse, France
- 2012 Functional Analysis Conference, Temesvf
 Algebra Conference, Esfahan, Irań
 QQQ Conference, Tallinn, Estonia
 Sophus Lie Seminar Luxembourg
 Loday Conference, Strassbourg, France
- 2013 Mathematische Arbeitstagung, Bonn
 6th EMS Congress, Krakow, Poland
 Buchstaber Conference, Moscow
 International Conference for B.L.Feigin, Moscow
- 2014 Sophus Lie Workshop, Marienthal, Germany

- 2015 Caucasian Conference, Tbilisi, Georgia
 TICMI Advanced Courses, Tbilisi, Georgia
 Institute of Mathematics, University of Pécs
- 2016 Superalgebras Conference Esfahan, Iran
 Sophus Lie Seminar 50, Bedlewo, Poland
- 2017 Moscow State University, Russia
 Babes-Bolyai University, Cluj Napoca, Romania
- 2018 Nonassociative Algebras Conference, Cadiz, Spain
 Lie algebras Conference, Lancaster, England
 Humboldt Conference, Budapest
- 2019 Babes-Bolyai University, Cluj Napoca, Romania
 Max-Planck Institute for Mathematics, Bonn, Germany
- 2021 AMINSE 2020 Tbilisi, Georgia, online Conference

Selected Publications

NOTE: For more, around 100 items (including some PDFs), see www.renyi.hu/~fialowsk/pubs-af/AF-Pubs-Sep5-2022.html OR www.researchgate.net/search/publication?q=fialowsk&af=AF-Pubs-Sep5-2022.html; Alice Fialowski Publications; a

1. Fialowski A., “On the classification of graded Lie algebras with two generators,” *Vestnyik MGU*, (1983), pp. 62–64 (in Russian). English translation: *Moscow Univ. Math. Bull.*, **38** (1983), no. 2, 76–79
2. Fialowski A. (see also “Fialovski”), “Deformations of Lie algebras,” *Mat.Sbornik USSR*, **127 (169)**, (1985), pp. 476–482; English translation: *Math. USSR-Sb.*, **55**, (1986), no. 2, 467–473.
3. Fialowski A., “An example of formal deformations of Lie algebras” *NATO Conference on Deformation Theory of Algebras and Applications, Il Ciocco, Italy, 1986*, Proceedings. Kluwer, Dordrecht, 1988, pp. 375–401.
4. Fialowski A., Fuchs D.B., “Construction of Miniversal Deformations of Lie Algebras,” *Journal of Functional Analysis*, 161/1 (1999), pp. 76–110.
5. Fialowski, A., Penkava, M., “Deformation Theory of Infinity Algebras,” *Journal of Algebra*, **255** (2002), pp. 59–88.
6. Fialowski, A., Schlichenmaier, M., “Global Deformations of the Witt Algebra of Krichever-Novikov Type,” *Communications in Contemporary Mathematics*, **5** (2003), 921–945.
7. Fialowski, A., Millionschikov, D.V., “Cohomology of Graded Lie Algebras of Maximal Class,” *Journal of Algebra*, **296** (2006), 157–176.
8. Fialowski, A., Penkava, M. “Formal deformations, contractions and moduli spaces of Lie algebras”, *International Journal of Theoretical Physics*, **47** (2008), 561–582.
9. Fialowski, A., Iohara, K., ”Homology of Lie algebras of orthogonal and symplectic generalied Jacobi matrices”, *Rendiconti Lincei - Matematica e Applicazioni* **31**, 549-564, (2020).

10. Fialowski, A., Iohara, K., "Homology of the Lie algebra $gl(\infty, \mathbb{R})$, *Annali Della Scuola Normale Superiore di Pisa - Classe de Scienze*, **22**, 835-852 (2021).

Professional Activities

Member

American Mathematical Society,
European Mathematical Society

Bolyai Mathematical Society,
Ungarischer Humboldt Verein

Editor

Journal of Lie Theory,

Bulletin of the Iranian Mathematical Society, since 2021,

Journal of Generalized Lie Algebras and Applications, until 2020,

Springer-Verlag: Algebra and Applications (book series), since 2010.

International Committees, Duties

AMS Committee on International Affairs 1993–96.

Founder and Organizing Committee of University of California Intercampus Workshop on "Lie Groups, Lie Algebras, and their Representations", 1991–95.

Organizer of the Workshop "Deformations and Contractions in Mathematics and Physics", Oberwolfach, 2006.

Organizer of the Sophus Lie Seminar XXXVII in Budapest, 2008.

Organizer of the Workshop "Deformation Methods in Mathematics and Physics", Oberwolfach, 2010.

Member of the Geomath Research Group, Luxembourg, since 2010

Foreign evaluation member of the Irish Research Council, since 2013

Scientific Council member, International Banach Center, 2014-2-21

Scientific Council member, International Center of Math. and Informatics, Tbilisi, since 2014

Estonian Research Council member, since 2012

Vice Chair of the international QQQ Conference, Tallinn, 2012.

European Mathematical Society Executive Committee member, 2013-2016.

European Mathematical Society Solidarity Committee member, 2018-

Awards

Alexander-von-Humboldt Fellowship, Max-Planck-Institut für Mathematik, Bonn, 2 years

Széchenyi Professor Fellowship, 4 years (1998-2001)

Széchenyi István Scholarship, 3 years (2002-2005)

Officier's Cross Order of Merit of the Hungarian Republic, Civil Section, 2019