

Curriculum Vitae

SEBASTIAN M. BURCIU

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Research Interests:

- Tensor categories
 - Hopf algebras
 - Representation Theory
 - Algebraic groups
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Education:

- 2014, Habilitation, Institute of Mathematics “Simion Stoilow” of Romanian Academy.
 - 1999-2005, Ph.D. in Mathematics, Syracuse University, Syracuse, New York, USA.
 - 1997-1999, M.Sc. in Mathematics, University of Bucharest, Bucharest, Romania.
 - 1993-1997, B.S. Major: Mathematics, University of Bucharest, Bucharest, Romania.
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Employment:

- 1997-1999, Teaching Assistant, University Politehnica of Bucharest.
- 1999-2005, Teaching Assistant, Syracuse University, Syracuse, New York, USA.

- 2005-2006, Teaching Postdoctoral Fellow, Syracuse University, Syracuse, New York, USA.
 - 2007-2014, Researcher, Institute of Mathematics "Simion Stoilow" of the Romanian Academy, Bucharest, Romania.
 - 2014 - Researcher CS III, Institute of Mathematics "Simion Stoilow" of the Romanian Academy, Bucharest, Romania.
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Honors and Awards:

- Romanian Academy prize "Simion Stoilow" 2009, (awarded in 2011).
 - Graduate Student Fellowship, Syracuse University, 1999-2000, 2003-2004.
 - Departmental Summer Fellowship, Syracuse University, Summers of 2000, 2003, 2004.
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Research Grants:

- Director of CNCS-UEFSCDI grant PN-III-P4-ID-PCE-2016-0157, nr. 54 din 12.07.2017, 2017-2019.
 - Director of CNCS-UEFSCDI grant PN II - ID - RU-TE-2012-03-0168, nr. 7/23.04.2013, 2013.
 - Director of CNCSIS grant PN II - ID - RU-PD-2010-03-168, nr. 14/28.07.2010, 2010.
 - Member of CNCS-UEFSCDI grant PN II - ID - PCE-2011-3-0039, nr. 88/05.10.2011, 2011.
 - Member of CNCSIS grant PN II-RU-TE-45, nr. 88/02.08.2010, 2010.
 - European Union Postdoctoral Fellowship 2010-2013, PosDru 89/1.5/S/58852/.
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Conferences and Colloquia:

- *”Conjugacy classes and centralizers for modular tensor categories”*, at The Ninth Congress of Romanian Mathematicians, Galati, June 28 - July 3, 2019.
- *”Müger centralizer for representations of factorizable Hopf algebras“*, The Brussels Hopf Algebra Workshop 2017, Universite Libre de Bruxelles, Belgium, 29 - 30 August 2017.
- *”On an analogue of a Brauer’s theorem for fusion categories”* Workshop for Young Researchers in Mathematics, May 17-20, 2017, Bucharest, Romania.
- *”On the depth of subgroups and semisimple Hopf subalgebras”* Joint AMS & ESM & SPM Meeting, 10-13 June 2015, Porto, Portugal.
- *”On the irreducible modules of semisimple Drinfeld doubles and their fusion rules*, at *”New trends in Hopf algebras and tensor categories”*, 2-5 June 2015, Brussels, Belgium.
- *”Group actions on tensor categories”*, Algebra Seminar, University of Antwerp, June 17, 2014, Antwerp, Belgium.
- *”On the Grothendieck ring of a semisimple Drinfeld double”*, Hasselt University, June 26, 2014, Hasselt, Belgium.
- *”On the Grothendieck groups of equivariantized fusion categories”*, Erwin Schrödinger International Institute for Mathematical Physics (ESI), February 14, 2014, Wien, Austria.
- *”On the fusion rules of semisimple Drinfeld doubles”*, Algebra Seminar-Universidad de Almería, October 10, 2013, Almería, Spain.
- *”On the Grothendieck ring structure of the quantum double of a fusion category”*, Anniversary conference, *”Faculty of Sciences - 150 years”*, August 29 - September 1, 2013, Bucharest, Romania.
- *”Mackey theory for group actions on fusion categories”*, The XXIst International Conference on Integrable Systems and Quantum Symmetries, June 12 - 16, 2013, Prague, Czech Republic.

- “*Kernels of representations and coideal subalgebras of Hopf algebras*”, Workshop “Rings, Categories and Hopf Algebras”, for the 70th birthday of Professor Constantin Nastasescu, University of Bucharest, May 18 - 19, 2013, Bucharest, Romania.
- “*Irreducible representations of generalized quantum doubles*”, AGMP-8 Workshop, September 12 - 14, 2012, Brno, Czech Republic.
- “*Representations of semisimple Hopf algebras*”, University College Dublin, June 20, 2012, Dublin, Ireland.
- “*On the depth of Hopf subalgebras and coideal subalgebras*”, Lie Theory Seminar, University of Cordoba, November 10, 2011, Cordoba, Argentina.
- “*On the kernels of representations of semisimple Hopf algebras*”, Lie Theory Seminar, University of Cordoba, November 15, 2011, Cordoba, Argentina.
- “*On the kernels of the representations of semisimple Hopf algebras*”, Quantum theory and symmetries 7, August 13 - 17, 2011, Prague, Czech Republic.
- “*On Clifford theory for semisimple Hopf algebras*”, Hopf algebras and tensor categories, University of Almería, July 4 - 8, 2011, Almería, Spain.
- “*Clifford theory for semisimple Hopf algebras*”, 7-th Congress of Romanian Mathematicians, June 29 - July 5, 2011, Brasov, Romania.
- “*Kernels of representations and normal Hopf subalgebras*”, AGMP-6 Workshop: Tjarno, Chalmers University of Technology, 25 - 30 October, Göteborg, Sweden, 2010.
- “*Depth of Hopf subalgebras and normal Hopf subalgebras*”, Algebra Seminar, Friedrich Schiller-Universität Jena, Germany, October, 2010.
- “*Kernels of representations of Hopf algebras*”, Workshop: Quantum Groups, Université Blaise Pascal, Clermont-Ferrand, France, August 30 - September 3, 2010,

- “ *Quantum doubles of pointed Hopf algebras of rank two*”,
6-th Congress of Romanian Mathematicians, June 28 - July 4, 2007,
Bucharest, Romania.
- ” *On a class of Drinfeld doubles that are ribbon algebras*”,
NoMap, 22 - 26 July 2008, Brussels, Belgium.
- “*On some representations of the Drinfeld Double*”,
AMS National Meetings, January 5 - 8, 2005, Atlanta, Georgia.
- “*Drinfeld doubles and the adjoint representation*”,
Algebra Seminar, Syracuse University, November 2004, Syracuse.
- “*Representations of Degree Three for Semisimple Hopf Algebras*”,
Algebra Seminar, Syracuse University, September 2004.
- “*On some Representations of the Drinfel’d Double*”,
CMS/CAIMS Summer 2004 Meeting, Dalhousie University, June 13-15,
2004, Halifax, Nova Scotia, Canada.
- “*Braided Hopf Algebras*”,
MGO Conference, Syracuse University, April 2001, Syracuse, New York.
- “*Integrals and Hopf Galois Extensions*”,
Colloquium, Syracuse University, September 2000, Syracuse, New York.
- “*Hopf Galois Extensions*”,
Algebra Seminar, Syracuse University, September 2000, Syracuse.
- “*Semisimple Hopf Algebras and Kaplansky’s Sixth Conjecture*”,
Algebra Seminar, University of Bucharest, December 1999, Bucharest,
Romania.