Gleb Pogudin

Department of Mechanics and Mathematics   E-mail: pogudin.gleb@gmail.com
Moscow State University

Web-site: http://halgebra.math.msu.su/wiki/doku.php/shared:pogudingleb

Research Interests: Differential algebra, Lie algebras (identities, Lie algebras of Cartan type), Representation theory.

Education

Moscow State University, Moscow	Ph.D. in Mathematics	Oct, 2012 - Present
advisor: Yu.P. Razmyslov		
Moscow State University, Moscow	M.S. in Mathematics	Sept, 2007 - June, 2012
Diploma with honours	and Applied Mathematics	
advisor: Yu.P. Razmyslov		

Employment

Lecturer   2014 - Present
Moscow State University
Courses taught:

- Abstract Algebra I
- Abstract Algebra II
- Ring Theory

Math Instructor   2012 - Present
Advanced Educational Scientific Center of Moscow State University, A.N.Kolmogorov school
Courses taught:

- Calculus I
- Calculus II
- Intermediate Algebra
- Nonstandard problems in Algebra and Geometry (Mathematical Circles)

Math Instructor   2014 - Present
College of Moscow Institute of Physics and Technology
Courses taught: Discrete Mathematics, Probability and Statistics

Programmer   2012 - 2013
Yandex Company, Banner System
Real-time computations and Data Analysis.

Additional training

Programming skills: Perl, Python, C++, SQL, Coq (basic).
I have finished several online open courses:

1. Functional Programming Principles in Scala (École Polytechnique Fédérale de Lausanne, with distinction).

2. Introduction to Neuroeconomics: how the brain makes decisions (Higher School of Economics, Moscow).

3. Logic: Language and Information 2 (The University of Melbourne, with distinction).

4. Foundations of Teaching for Learning 1: Introduction (Commonwealth Education Trust, with distinction).

5. Foundations of Teaching for Learning 2: Being a Teacher (Commonwealth Education Trust, with distinction).

Awards

1. *2014* Winner of Russian Math Teachers Competition (~ 120 participants).

2. *2014* Receiver of grant of Education Department of Moscow.

Publications

Published peer-reviewed articles and articles accepted for publication:

1. Gustavson R., Ovchinnikov A., Pogudin G., *Bounds for orders of derivatives in differential elimination algorithms*, http://arxiv.org/abs/1602.00246, accepted by International Symposium on Symbolic and Algebraic Computations 2016, doi:10.1145/2930889.2930922.

2. Golod E.S., Pogudin G., *Modules of zero Gorenstein dimension over graph algebras*, accepted by Sbornik:Mathematics, vol. 207, issue 7, doi:10.1070/SM8563, 2016.

3. Pogudin G., *The primitive element theorem for differential fields with zero derivation on the base field*, Journal of Pure and Applied Algebra, vol 219(9), pp. 4035-4041, 2015.

4. Pogudin G., *Primary differential nil-algebras do exist*, Moscow University Mathematics Bulletin, vol 69(1), pp 33-36, 2014.

5. Razmyslov Yu.P., Pogudin G., *The Heisenberg envelope for the Hochschild algebra of a finite-dimensional Lie algebra*, Journal of Mathematical Sciences, vol. 193(4), pp 580-585, 2013.

6. Razmuslov Yu.P., Pogudin G., *Paradigm of Max-Factor and finite-dimensional representation of Lie algebras*, Moscow University Mathematics Bulletin, vol. 67(4), pp 170-172, 2012.

7. Pogudin G., *Wronskian of derivations*, Moscow University Mathematics Bulletin, Volume 66(1), pp 47-49, 2011.

Journal articles under review:

1. Pogudin G., *A differential analog of the Noether normalization lemma*, arxiv.org/abs/1508.01943.

2. Razmyslov Yu.P., Pogudin G., *Prime Lie algebras satisfying the standard Lie identity of degree 5*, arxiv.org/abs/1507.06675.

Invited Presentations

1. *On the Existence of Surjective Projection of a d-Dimensional Differential Algebraic Variety onto $\mathbb{A}^d$*, Kolchin Workshop on Differential Algebra, New York, 13-15 May 2016.

2. *Differential analogue of the Primitive Element theorem*, Seminar on Computer Algebra, Moscow State Unversity and Dorodnicyn Computing Centre, Moscow, 20 April 2016.

3. *A "polynomial shifting" trick in differential algebra*, MACIS, Berlin, 11-13 November 2015.

4. *Some properties of the differential ideal $[x^m]$* (poster), Model Theory, Difference/Differential Equations and Applications, Lumini, 7-10 April 2015.

5. *On the primitive element theorem for differential field extensions with zero derivation on the base field*, Polynomial Computer Algebra, St. Petersburg, 16-19 April 2014.

6. *Some properties of the differential ideal $[x^m]$*, Polynomial Computer Algebra, St. Petersburg, 6-10 May 2013.