

# Curriculum vitæ

EVGENY SMIRNOV

## Personal Details

**Date and Place of Birth:** November 9, 1982, Moscow, Russia  
**Nationality:** Russian  
**Address:** Laboratoire J.-V. Poncelet  
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## Current position

**09.2009–present** *Researcher*, Laboratoire franco-russe J.-V. Poncelet (UMI 2615);

**09.2009–present** *Assistant professor*, Higher School of Economics, Department of Mathematics.

## Research interests

Algebraic groups, equivariant algebraic geometry, representation theory, combinatorics.

## Positions held previously, Education

**10.2008–08.2009** *Postdoctoral Research Fellow*, Hausdorff Center for Mathematics, Rheinische Friedrich-Wilhelms-Universität Bonn, Germany

**10.2007–09.2008** *SFB/TR45 Postdoctoral Research Fellow*, Mathematisches Institut, Rheinische Friedrich-Wilhelms-Universität Bonn, Germany

**2004–2007** *Doctorat en mathématiques (Ph.D.)*, Université Joseph Fourier (Grenoble I); joint graduate program (*thèse en cotutelle*) with the Independent University of Moscow and Lomonossov Moscow State University

**Thesis supervisors:** Michel Brion, Ernest Vinberg

**Ph.D. thesis title:** Orbits of a Borel subgroup in the product of two Grassmannians

**Ph.D. thesis defended** on October 29, 2007 in Institut Fourier, Grenoble; *mention* “très honorable”

**Official referees:** Bernard Leclerc, Andrei Zelevinsky

**1999–2004** *Specialist degree in Mathematics (M.Sc. equivalent)*, Independent University of Moscow;

**1999–2004** *Specialist degree in Mathematics (M.Sc. equivalent)*, Diploma cum laude, Lomonossov Moscow State University, Dept. of Mechanics and Mathematics.

**Diploma thesis (M.Sc. thesis) title:** On natural differential operations.

**Supervisors:** Ernest Vinberg, Pavel Katsylo.

**1996–1999** Moscow State 57th School, classgroup majoring in mathematics.

## Publications

1. *Springer fiber components in the two columns case for types A and D are normal* (with N. Perrin), 18 pages. Preprint available on [arXiv:0907.0607](https://arxiv.org/abs/0907.0607).
2. *Bruhat order for two subspaces and a flag*, 30 pages, submitted for publication, 2007. Preprint available on [arXiv:math/0704.3061](https://arxiv.org/abs/math/0704.3061).
3. *Desingularizations of Schubert varieties in double Grassmannians*, *Functional Analysis and its Applications*, **42** (2008), no. 2, 56–67. Available on [arXiv:math.AG/0608554](https://arxiv.org/abs/math.AG/0608554).
4. *On generating sets of ideals defining S-varieties*, *Vestnik Moskov. Univ. Ser. I Mat. Mekh.* **70** (2005), no. 3, , pp. 3–6 (in Russian). English translation: *Moscow Univ. Math. Bull.* 60 (2005), no. 3, 1–4 (2006).

## Popularization of mathematics

5. *Reflection groups and regular polyhedra*, 48 p., MCCME, Moscow, 2009 (in Russian)

## Teaching Experience

**2009-present** Higher School of Economics

Courses taught:

- Geometry 1, exercise sessions (*Fall 2009*);
- Research initiation seminar “Groups and geometry” (*Fall 2009*).

**2006–present** Independent University of Moscow;

Courses taught:

- Program for foreign students “Math in Moscow”, Basic Representation Theory (*Fall 2009*);
- Geometry 1, exercise sessions (*Spring 2007*).
- Program for foreign students “Math in Moscow”, tutorial (*Spring 2007*);
- Grassmannians and flag varieties, course for 3rd–4th year (*Spring 2006*);
- Topology 1, exercise sessions (*Spring 2006*).

**2008–2009** Mini-courses

- Geometry of Grassmannians, mini-course for Ph.D. students, 3 talks of 90 minutes, Jacobs University Bremen. (*March 2009*)
- Reflection groups and regular polyhedra, mini-course for undergraduate students, 4 talks of 75 minutes, Summer school “Contemporary Mathematics”, Dubna, Russia. (*July 2008*)

**1999–2007** Moscow State 57th School, teacher of advanced mathematics in classgroups majoring in mathematics (part-time).

### **Seminar and conference talks**

**Jun. 2009** French–Russian workshop “Combinatorics, Geometry and Physics”, J.-V. Poncelet Laboratory, Moscow, Russia

**Jun. 2009** Summer school in Lie algebras and invariant theory, Samara, Russia

**Mar. 2009** Two talks at the St. Petersburg branch of Steklov mathematical institute, St. Petersburg, Russia

**Mar. 2009** Algebra, geometry & topology seminar, University of Basel, Switzerland

**Feb. 2009** Colloquium, Dept. of Mathematics, Higher School of Economics, Moscow, Russia

**Jan. 2009** Russian–Japanese School in Representation Theory, University of Kyoto, Japan

**Jun. 2008** Representation theory seminar, University of Bonn, Germany;

**May 2008** Algebra seminar, University of Cologne, Germany;

**May 2008** Algebra and representation theory seminar, Jacobs University Bremen, Germany;

**Apr. 2008** Géométrie Algébrique en Liberté XVI, Madrid, Spain;  
**Jan. 2008** Winter solstice master class on enveloping algebras, Weizmann Institute of Science, Israel;  
**Nov. 2007** Algebra seminar, University of Lyon 1, France;  
**Nov. 2007** Representation theory seminar, University of Bonn, Germany;  
**2007** Two talks, Algebra & Geometry seminar, Fourier Institute, Grenoble, France;  
**2004–2007** About 10 talks at the Independent University of Moscow and Moscow State University, Russia;  
**Apr. 2006** French-Russian conference “Journées des jeunes en cotutelle”, Poncelet Laboratory, Moscow, Russia;  
**Jan. 2004** Graduate seminar, Ecole Normale Supérieure, Paris, France.

### **Grants, honors, memberships**

**2004–2007** Grant of the French Government for a joint French–Russian Ph.D. program (Bourse du Gouvernement Français de thèse en cotutelle);  
**2007–2009** Russian Foundation for Basic Research and Centre National de Recherches Scientifiques (France), research grant No. 07-01-92214;  
**Since 2007** Member of the French Mathematical Society (SMF).

### **Reviewing**

**2007–present** Reviewer, Zentralblatt MATH.

### **Languages spoken**

- Russian (native);
- English (fluent);
- French (fluent);
- German (intermediate).

### **Computer skills**

Linux, L<sup>A</sup>T<sub>E</sub>X, C, Pascal, Maple, LiE.