

**CURRICULUM VITAE**  
**Natalia Kopteva**

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**CONTACT ADDRESS:**

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**PERSONAL:**

born on July 23, **1977** in Novosibirsk, RUSSIA;  
marital status: single;  
nationality: Russian

**EDUCATION:**

- 1998**      **BSc (first class)** from the Novosibirsk Technical University (Novosibirsk, Russia).  
Diploma title: “*Torsion-free subgroups of finite index in groups uniformising hyperbolic orbifolds*” (advisor Dr. Elena Klimenko).
- 2000**      **MSc (first class)** from the Novosibirsk Technical University.  
Diploma title: “*Geometry of two-generator discrete groups*” (advisor Dr. Elena Klimenko).
- 2003**      **PhD** from Heriot-Watt University (Edinburgh, UK).  
Thesis title: “*Generalised tetrahedron groups and groups uniformising hyperbolic orbifolds*” (advisor Prof. James Howie).

**POSITIONS:**

- 2003 – 2004**      Senior Engineer; Sobolev Institute of Mathematics (Novosibirsk, Russia).  
**2004 – present**      Postdoctoral Fellow (Marie Curie Fellowship); Université de Provence (Marseille, France).

**ACADEMIC AWARDS:**

- 2000 – 2003**      – James Watt Scholarship (Heriot-Watt University, Edinburgh);  
– ORS Award (UK Scholarship for international research students).
- 2004**      – Research grant from Gettysburg College (Gettysburg, USA).
- 2004 – 2006**      – Marie Curie Fellowship.

**RESEARCH INTERESTS:**

Combinatorial and geometric group theory, Kleinian groups, hyperbolic geometry, geometrical structures on manifolds and orbifolds, knot theory.

**CONFERENCES, WORKSHOPS and MEETINGS:**

- 1999**      – International Summer Conference “*Low-dimensional Topology and Combinatorial Group Theory*”, Chelyabinsk, Russia;  
– International Conference “*Analysis and Geometry-99*”, Novosibirsk, Russia.
- 2000**      – International Conference “*Geometry and Application*”, Novosibirsk, Russia;  
– International Conference “*Geometric and Combinatorial Group Theory*”, Haifa, Israel;

- Karyn Kupcinet International Science School, Weizmann Institute of Science, Israel (June–August 2000).
- 2001**
- 53rd British Mathematical Colloquium, Glasgow, UK;
  - Algebraic Topology Conference, Nantes, France;
  - Workshop on Kleinian Groups and Hyperbolic 3-Manifolds, University of Warwick, UK.
- 2002**
- 2nd Russian-German Geometry Meeting, St. Petersburg, Russia;
  - Janos Bolyai Conference on Hyperbolic Geometry, Budapest, Hungary.
- 2003**
- LMS Durham Symposium: Geometry and Cohomology in Group Theory, University of Durham, UK.
- 2005**
- Summer School and Conference on Geometry and Topology of 3-Manifolds, ICTP, Trieste, Italy.
- 2006**
- Workshop on 3-manifolds after Perelman, Edinburgh, UK;
  - Rigidity and Flexibility, ESI, Vienna, Austria;
  - Knots, Groups and 3-Manifolds, Marseille, France;
  - Conference on 3-manifold Topology in Honour of Peter Shalen’s 60th Birthday, CRM, Montréal, Canada.

#### **RESEARCH VISITS:**

**October 2004** Gettysburg College (Gettysburg, USA).

**February 2006** Tokyo Institute of Technology (Tokyo, Japan).

#### **SEMINARS (talks):**

- 1998 – 2002** Novosibirsk University; Novosibirsk Technical University; Sobolev Institute of Mathematics (Novosibirsk); Heriot-Watt University (Edinburgh).
- 2003** Edinburgh University; Sobolev Institute of Mathematics.
- 2004** Gettysburg College (Gettysburg, USA); University of North Carolina (Chapel Hill, USA).
- 2005** Université de Provence (Marseille, France); Institut de Mathématiques de Bourgogne (Dijon, France).
- 2006** Tokyo Institute of Technology (Tokyo, Japan).

#### **LIST OF PUBLICATIONS:**

1. E. Klimenko and N. Kopteva, *Criteria for discreteness for two-generator subgroups of  $\mathrm{PSL}(2, \mathbf{C})$  with real parameters*, Low-dimensional topology and combinatorial group theory. Chelyabinsk, July 1999: Proc. of the International Conf., pp. 168–178, Kiev, 2000.
2. E. Klimenko and N. Kopteva, *Discreteness criteria for  $\mathcal{RP}$  groups*, Israel J. Math., 128 (2002), 247–266.
3. N. V. Kopteva, *Solvable systems of equations modeled on some spines of 3-manifolds*, Sib. Math. J., 44 (2003), no. 2, 278–285.

4. V. Alexandrov, N. Kopteva, S. S. Kutateladze, *Blaschke addition and convex polyhedra* (in Russian), Tr. Semin. Vektorn. Tenzorn. Anal., 26 (2005), 8–30.
5. E. Klimenko and N. Kopteva, *All discrete  $\mathcal{RP}$  groups whose generators have real traces*, Int. J. Algebra Comput., 15 (2005), no. 3, 577–618.
6. E. Klimenko and N. Kopteva, *Discrete  $\mathcal{RP}$  groups with a parabolic generator*, Sib. Math. J., 46 (2005), no. 6, 1069–1076.
7. J. Howie and N. Kopteva, *The Tits alternative for generalised tetrahedron groups*, J. Group Theory, 9 (2006), no. 2, 173–189.
8. E. Klimenko and N. Kopteva, *A two-dimensional slice through the parameter space of Kleinian groups*, preprint, 2005, available at <http://www.arxiv.org/math.GR/0512441>.
9. E. Klimenko and N. Kopteva, *Two-generator Kleinian orbifolds*, preprint, 2006, available at <http://www.arxiv.org/math.GT/0606066>.
10. N. Kopteva and G. Williams, *The Tits alternative for non-spherical Pride groups*, preprint, 2006, available at <http://www.arxiv.org/math.GR/0607528>.