



Workshop “Geometric analysis and mathematical physics”
December 8-13, 2011

Program

December 8, Thursday

- 9:00-9:05 Opening
- 9:05-9:55 **Valery Berestovskii** (Omsk Branch of Sobolev Institute of
Mathematics, Russia)
Homogeneous manifolds with no invariant sub-Riemannian metric
- 10:00-10:50 **Irina Markina** (University of Bergen, Norway)
*What is common in Sub-Riemannian geometry and geometry of
Yang-Mills theory?*
- 10:50-11:10 Coffee break
- 11:10-12:00 **Victor Gichev** (Omsk Branch of Sobolev Institute of
Mathematics, Russia)
*On metric properties of Laplace-Beltrami eigenfunctions on compact
homogeneous spaces*
- 12:05-12:55 **Alexander Vasil'ev** (University of Bergen, Norway)
Sub-Riemannian geodesics on $SU(2)$ and $SU(1,1)$
- 12:55-15:00 Lunch
- 15:00- 15:50 **Yurii Neretin** (University of Vienna, Austria)
TBA
- 16:45-evening St.Lucia celebration starts

December 9, Friday

- 14:00-14:50 **Sergey Vodopyanov** (Sobolev Institute of Mathematics, Novosibirsk, Russia)
TBA
- 15:00-15:30 Coffee break
- 15:30-16:20 **Mauricio Godoy** (École Polytechnique, France)
Rolling against a space form of negative curvature
- 16:30-17:20 **Erlend Grong** (University of Bergen, Norway)
Geometry and the problem of rolling manifolds
- 17:30-18:20 **Hélène Airault** (Université de Picardie, Saint-Quentin, France)
Brownian motion on an infinite dimensional Lie group
- 19:00- Music session

December 10, Saturday

Free day

December 11, Sunday

Free day

December 12, Monday

- 14:00-14:50 **Nam-Gyu, Kang** (Seoul National University, Republic of Korea)
Distribution of eigenvalues of normal random matrices near the edge of the spectrum
- 15:00-15:30 Coffee break
- 15:30-16:20 **Martin Schlichenmaier** (University of Luxembourg)
Berezin transform for compact Kaehler manifolds and applications
- 16:30-17:20 **Mark Mineev-Weinstein** (NMC, Los Alamos, USA)
News in elliptic and stochastic growth
- 17:30-18:20 **Jan Felipe van Diejen** (Pontificia Universidad Católica, Santiago, Chile)
TBA

December 13, Tuesday

- 14:00-14:50 **Catherine Bénéteau** (University of South Florida, Tampa, USA)
The Isoperimetric Inequality and Free Boundary Problems - Part I
- 15:00-15:30 Coffee break
- 15:30-16:20 **Dmitry Khavinson** (University of South Florida, Tampa, USA)
The Isoperimetric Inequality and Free Boundary Problems - Part II
- 16:30-17:20 **Jens Hoppe** (KTH, Stockholm, Sweden)
Integrable hyposurface motion
- 17:30-18:20 **Evgeny Korotyaev** (École Polytechnique, Palaiseau, France)
The Loewner equation and action variables for dNLS on the circle
- 18:30-evening Reception in the Flower Room