

**GEOQUANT 2013****August 19 - 30****Organized by:****Pierre Bieliavsky, Harald Grosse, Ryoichi Kobayashi,  
Martin Schlichenmaier, Armen Sergeev, Oleg Sheinman, Weiping Zhang****Conference Schedule: August 26 - 30, 2013****• Monday, August 26, 2013:**09:30 **Registration and Opening**09:45 – 10:35 **Anton Alekseev***Logarithms and deformation quantization*

10:35 – 11:05 Coffee break

11:05 – 11:55: **Ryoichi Kobayashi***Hamiltonian volume minimizing property of maximal torus orbits in complex projective spaces*11:55 – 12:45 **Michele Vergne***An Euler-MacLaurin formula for the equivariant index of a transversally elliptic operator*

12:45 – 14:30 Lunch break

14:30 – 15:20 **Dimitry Talalaev***On deformation quantization of integrable systems*15:20 – 16:10 **Georgy Sharygin***Full symmetric Toda system and Bruhat order*16:40 – 17:30 **Xiangyu Zhou***Some results on the  $L^2$  extension problem***• Tuesday, August 27, 2013**09:30 – 10:20: **Shin-Ichi Oguni***On the coarse Baum-Connes conjecture*

10:20 – 10:50 Coffee break

10:50 – 11:40 **Tomohiro Fukaya***The coarse Baum-Connes conjecture for relatively hyperbolic group*11:40 – 12:30 **Ugo Bruzzo***Stacky resolutions of moduli spaces of instantons*

12:30 – 14:30 Lunch break

14:30 – 15:20 **Alexey Gorodentsev***Mukai Lattice*

15:20 – 16:10 **Detlev Buchholz**

*The resolvent algebra: a new approach to canonical quantum systems.*

16:40 – 17:30 **Alexey Parshin**

*Base change and automorphic induction in the Langlands theory*

• **Wednesday, August 28, 2013**

09:30 – 10:20: **Armen Sergeev**

*Quantum Calculus and non-commutative Bloch theory*

10:20 – 10:50 Coffee break

10:50 – 11:40 **Gandalf Lechner**

*Non-local perturbations of hyperbolic PDEs and QFT models on non-commutative spacetimes*

11:40 – 12:30

**Miroslav Engliš**

*Spectral triples and generalized Toeplitz operators*

• **Thursday, August 29, 2013**

09:30 – 10:20 **Alexander Karabegov**

*On Gammelgaard's formula for a star product with separation of variables*

10:20 – 10:50 Coffee break

10:50 – 11:40 **George Marinescu**

*Equidistribution of random zeros on complex manifolds*

11:40 – 12:30 **Xiaonan Ma**

*Flat vector bundle and Toeplitz operators*

12:30 – 14:30 Lunch break

14:30 – 15:20 **Alejandro Uribe**

*The exponential map of the complexification of  $\text{Ham}(M, \omega)$  in the real-analytic case.*

15:20 – 16:10 **Will Kirwin**

*Complex-time evolution in geometric quantization*

16:40 – 17:30 **Siye Wu**

*Hitchin's equations on a non-orientable manifold*

• **Friday, August 30, 2013**

09:30 – 10:20 **Brian Hall**

*The large- $N$  limit of the Segal-Bargmann transform on unitary groups*

10:20 – 10:50 Coffee break

10:50 – 11:40 **Andrei Shafarevich**

*Quantization conditions on Riemann surfaces and spectral series of non-selfadjoint operators*

11:40 – 12:30 **Hajimi Fujita**

*Equivariant local index and transverse index for circle action*

12:30 – 14:30 Lunch break

14:30 – 15:20 **Takahiko Yoshida**

*On the local index*

15:20 – 16:10 **Tilman Wurzbacher**

*Integration of vector fields on supermanifolds and applications*

16:40 – 17:30 **Jürgen Fuchs**

*Three-dimensional topological field theories on manifolds with boundaries and defects*

**All lectures take place at the ESI Boltzmann Lecture Hall**