

## Schedule for the conference GEOQUANT

at the University of Luxembourg

7.9.2009 – 11.9.2009

### General remarks:

- For each speaker either 50 or 25 minutes are assigned for the presentation, with additional 5 minutes for discussions. As the schedule is rather tight the speakers are asked to respect strictly the time limit.
- The lectures will take place in the Batiment des Sciences in the big lecture hall (BS 1.03). The lecture hall has big black-boards, an overhead projector and a beamer. In case of a beamer presentation it is preferred if you bring your pdf file on a usb-stick with you and we will upload it onto the local computer.
- There will be a **poster-session** on Thursday (10.9.). It will be on the first floor of the Science Building. Registered participants are entitled to present a poster. But registration for presenting a poster is required during the registration process on Monday. On Thursday morning boards will be assigned to registered posters. Presenters will have to arrange the display of their posters themselves.
- **Registration** will be necessary and will take place Monday, 7.9.2009 from 8.30 to 9:30 in the Batiment des Recherches B (BRB) in the meeting room, ground floor. Those participants who want to join the dinner on Wednesday (with a contribution of 10 Euro per person) and/or the excursion on Wednesday afternoon (free of charge) have to declare this during the registration. Late registrations will be possible the whole Monday morning in the mentioned room. For registration at other days, please contact Katharina Heil, BRB, 1. floor, BR 1.10a

Date: 8.9.2009 (hopefully final)

## Monday, September 7, 2009

- 8.30 - 9.30 : **Registration**
- 9.30 - 10.00 : Welcome
- 10.00 - 10.50 : *Andersen, Jorgen, Aarhus, Denmark:*  
The Hitchin connection, Toeplitz operators and TQFT
- 11:00 - 11.30 : **Coffee break**
- 11.30 - 12.20 : *Dai, Xianzhe, Santa Barbara, USA:*  
The asymptotic expansion of Bergman kernel
- 12.30 - 12.55 : *Osipov, Denis, Moscow, Russia:*  
Formal groups arising from formal punctured ribbons
- 13.00 - 14.00 : **Lunch break**
- 14.00 - 14.50 : *Marinescu, George Cologne, Germany*  
Toeplitz operators on complex and symplectic manifolds
- 15.00 - 15.50 : *Ma, Xiaonan, Paris, France:*  
Bergman kernel and geometric quantization
- 15.50 - 16.20 : **Coffee break**
- 16.20 - 17.10 : *Wendland, Katrin, Augsburg, Germany:*  
Asymptotic analysis for unitary conformal field theories
- 17.20 - 17.45 : *Schottenloher, Martin, Munich, Germany:*  
The geometric phase in QED
- 17.50 - 18.30 : *Sheinman, Oleg, Moscow, Russia:*  
Lax operator algebras and integrable systems
- 18.30 - 20.00 : **Reception**

## Tuesday, September 8, 2009

- 9.30 - 10.20 : *Driver, Bruce, San Diego, USA:*  
Holomorphic functions and subelliptic heat kernels over Lie group
- 10.30 - 11.00 : **Coffee break**
- 11.00 - 11.50 : *Englis, Mirek, Prague, Tschech Republic:*  
Toeplitz quantization on real symmetric domains
- 12.00 - 12.50 : *Upmeyer, Harald, Marburg, Germany:*  
Generalized Fock spaces on Jordan varieties
- 13.00 - 14.00 : **Lunch break**
- 14.00 - 14.50 : *Gorodentsev, Alexey, Moscow, Russia:*  
Functorial A infinity coproduct of combinatorial simplicial chains  
that induces itself under barycentric subdivision
- 15.00 - 15.50 : *Tyurin, Nikolai, Dubna, Russia:*  
Non toric lagrangian fibrations of toric (and non toric) Fano varieties
- 15.50 - 16.20 : **Coffee break**
- 16.20 - 17.10 : *Fujita, Hajime, Tokyo, Japan:*  
Torus fibrations and localization of index
- 17.20 - 17.45 : *Yoshida, Takahiko, Japan:*  
Torus fibrations and localization of index – application to  
locally toric Lagrangian fibrations
- 17.50 - 18.40 : *Shoikhet, Boris, Luxembourg:*  
Bialgebras and n-monoidal categories

**Wednesday, September 9, 2009**

- 9.30 - 10.20 : *Huebschmann, Johannes, Lille, France:*  
Line bundles on moduli and related spaces
- 10.30 - 11.00 : **Coffee break**
- 11:00 - 11.50 : *Kori, Tosiaki, Tokyo, Japan:*  
Geometric pre-quantization of  $SU(N)$  flat connections on 3-manifolds
- 12.00 - 12.50 : *Kaledin, Dmitry, Moscow, Russia:*  
Cotangent bundles of complex Grassmanians and  
representation theory
- 13.00 - 14.00 : **Lunch break**
- 14.00 – : **Excursion**
- 20.00 - 23.00 : **Conference dinner: Restaurant Last Supper**

**Thursday, September 10, 2009**

- 9.30 - 10.20 : *Charles, Laurent, Paris, France:*  
Quantization of polygon space
- 10.30 - 11.00 : **Coffee break**
- 11.00 - 11.50 : *Paoletti, Robert, Milano, Italy:*  
Local asymptotics for Toeplitz operators
- 12.00 - 12.50 : *Shadrin, Sergey, Amsterdam:*  
An explicit construction of BCOV cohomological field theory
- 13.00 - 14.00 : **Lunch break**
- 14.00 - 14.50 : *Tate, Tatsuya, Nagoya, Japan:*  
An asymptotic Euler-Maclaurin formula for Delzant polytopes
- 15.00 - 15.50 : *Karabegov, Alexander, Abilene, USA:*  
Formal symplectic groupoids with separation of variables  
and Bergman idempotent
- 15.50 - 16.20 : **coffee break**
- 16.20 - 17.10 : *Nohara, Yuichi, Nagoya, Japan:*  
Toric degenerations of Gelfand-Cetlin systems and potential functions
- 17.20 - 17.45 : *Moriyama, Takayuki, Kyoto, Japan:*  
Deformations of transverse Calabi-Yau structures on foliated manifolds
- 17.50 - 18.15 : *Baier, Thomas, Lisbon, Portugal:*  
Geometric quantization of families of degenerating complex structures

During the whole day there will be the **poster presentation** on the first floor of the Batiment des Sciences building

**Friday, September 11, 2009**

- 9.30 - 10.20 : *Talalaev, Dmitry, Moscow, Russia:*  
The elliptic quantum spin model
- 10.30 - 11.00 : **Coffee break**
- 11.00 - 11.50 : *Natanzon, Sergey, Moscow, Russia:*  
Topological string theory
- 12.00 - 12.50 : *Treschev, Dmitry, Moscow, Russia:*  
Non-commutative structures and operators on Hilbert spaces
- 13.00 - 14.00 : **Lunch break**
- 14.00 - 14.50 : *Bondal, Alexey, Aberdeen, UK :*  
Orthogonal decomposition of Lie algebras and  
a problem of quantum information
- 15.00 - 15.50 : *Mano, Toshiyuki, Kyoto, Japan:*  
The Riemann-Wirtinger integral and its application
- 15.50 - 16.20 : **Coffee break**
- 16.20 - 17.00 : *Khudaverdian, Hovhannes, Manchester, UK:*  
Differential forms in an odd symplectic geometry and Pfaffians
- 17.00 : **Closing**