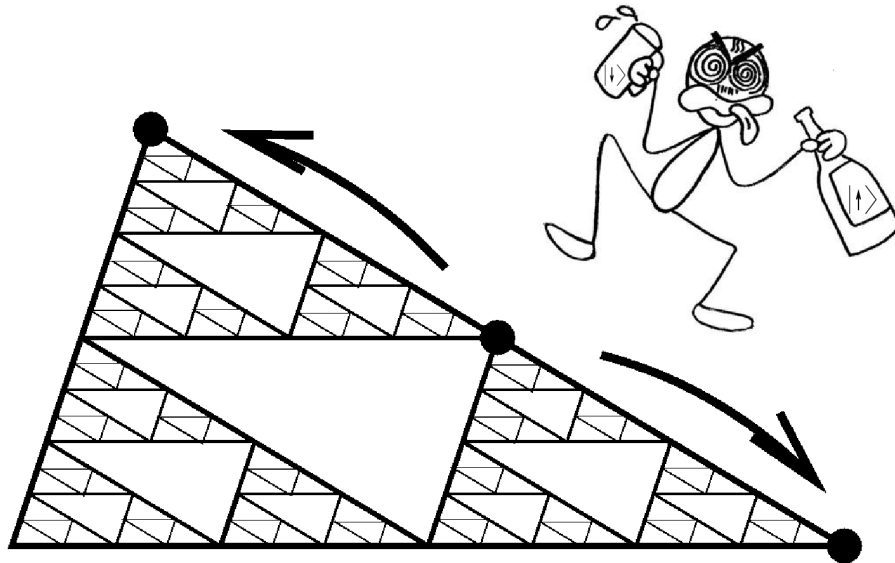


Announcement

Quantum Potential Theory: Structure and Applications to Physics

at the Alfried Krupp Kolleg Greifswald, February 26 - March 10, 2007



The objective of this school is to provide an introduction to quantum probability and in particular to quantum potential theory. Recent progress in this area, ranging from the mathematical structure to its applications in quantum physics will be covered. As an introduction to quantum probability this school pursues similar goals as the school on Quantum Independent Increment Processes that took place in March 2003. But the content of the lectures will be largely disjoint from those of the previous school.

The lectures are intended to be accessible to graduate students in mathematics and theoretical physics having no previous experience in this field, the necessary prerequisites from classical probability, functional analysis and quantum physics will be part of the first week. The second week will present recent progress in quantum potential theory and its applications.

Program

First Week (February 27 - March 3, 2007)

- Nicolas Privault (Université de Poitiers): Potential Theory in Classical Probability
- Quanhua Xu (Université de Franche-Comté, Besançon): Quantum Probabilistic Methods in Operator Space Theory
- Luc Bouten (California Institute of Technology, Pasadena): Applications of Controlled Quantum Processes in Quantum Optics

Second Week (March 5-9, 2007)

- Fabio Cipriani (Politecnico die Milano): Noncommutative Dirichlet Forms
- Philippe Biane (CNRS and Ecole Normale Supérieure, Paris): Random Walks on Discrete Quantum Groups
- Norio Konno (Yokohama National University): Quantum Walks

Participation fees

	normal rate	student rate
“non-luxury” rooms	700,- euros	550,- euros
“luxury” rooms	1000,- euros	800,- euros

The participation fee contains accommodation and meals for the duration of the school. The participation fee has to be paid before **February 1, 2007**. The “luxury” rooms are standard single rooms with shower or bath, the “non-luxury” rooms are student dorm rooms and double or triple rooms that have to be shared with other participants.

There will be a limited number of grants available for students and postdocs. Students and postdocs applying for a grant should explain their interest in the school on a separate sheet and join a short CV and a letter of recommendation by their advisor with their registration.

The deadline for registration is **February 15, 2006**. Registrations received after that date can only be considered in exceptional cases.

Further information and registration

Further information on the program of the school and registration forms can be found on the web page

<http://www.math-inf.uni-greifswald.de/algebra/qpt>

If you have any questions, please contact

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