

# August 03 - 07, 2009



Workshop

## Chern-Simons Gauge Theory: 20 years after

**Organizers:** Joergen Ellegaard Andersen (Aarhus University, Denmark), Hans Boden (McMaster University, Canada), Atle Hahn (Lisbon University, Portugal), Benjamin Himpel (Bonn University, Germany)

**Location:** Max Planck Institute for Mathematics in Bonn

**Chern-Simons theory** has developed in several different directions since its relation to knot theory was discovered by Witten 20 years ago. On the one hand, there have been several advances in understanding the TQFT approach to his 3-manifold invariants and the semiclassical approximation, as well as in treating the Feynman path integral version rigorously using stochastic analysis. On the other hand, Witten's seminal work initiated lots of interesting questions and results in knot theory and geometric topology, as well as the development of entirely new fields.

**The aim** of the workshop is to assemble researchers from geometric topology, stochastic analysis and mathematical physics with a particular interest in Chern-Simons theory.

**Participation:** The Hausdorff Center invites researchers to participate in this workshop. Registration is free but mandatory. Limited funds are available, in particular for young scientists. Please fill out the online registration form [http://www.hausdorff-center.uni-bonn.de/event/2009/gauge\\_theory/registration](http://www.hausdorff-center.uni-bonn.de/event/2009/gauge_theory/registration) on the workshop webpage. Application deadline: **April 15, 2009**.

For detailed information, please visit the workshop webpage [http://www.hausdorff-center.uni-bonn.de/event/2009/gauge\\_theory/](http://www.hausdorff-center.uni-bonn.de/event/2009/gauge_theory/)