Prof. Dr. Sebastian Diehl
Institute for Theoretical Physics
University of Cologne
Website Group Prof. Diehl

October 2015

We currently have openings for **PhD and Postdoc positions** to join our group in the frame of the ERC Consolidator Grant “Many-Body Physics with Driven Open Quantum Systems of Atoms, Light and Solids” (DOQS). **A five-year perspective can be offered to a senior postdoc candidate.**

The group will move from Dresden to the University of Cologne in November 2015. The lively and interdisciplinary atmosphere at the Institute for Theoretical Physics and the Bonn-Cologne Graduate School of Physics and Astronomy offer a unique environment for research.

The research will **be located at the exciting interface of quantum optics, quantum many-body physics and statistical mechanics**. We are interested in driven non-equilibrium systems, and aim at identifying novel universal phenomena, which witness the microscopic drive conditions on a macroscopic scale. To this end, **we develop new theoretical tools, and explore various experimental platforms**. Interactions with experimental groups (e.g. Vienna, Innsbruck, Zurich) will be encouraged. Specifically, we are looking for candidates with interest in

- Many-body physics, utilizing modern functional techniques from quantum field theory, or advanced numerical approaches.
- Quantum optics and AMO physics, in platforms such as ultracold atomic gases, exciton-polariton systems, microcavity arrays, trapped ions ...

Postdoc applicants should have a strong background in at least one of these areas, and the desire to broaden their knowledge.

Interested candidates are invited to send their CV, a short motivational statement, transcripts/grades of recent degrees/exams, and name and contact information of one (PhD) or two (Postdoc) potential reference(s) to: diehl@thp.uni-koeln.de
Applications should be sent before **November 30, 2015**, later applications will be considered until the positions are filled. Earliest starting date is February 01, 2016.
All documents and information provided will be treated with confidentiality.