Bad Honnef Physics School

Supported by the Wilhelm and Else Heraeus-Foundation

Physics of Strongly Coupled Systems

31 March - 5 April, 2019, Physikzentrum Bad Honnef, Germany

Organised by

Dietmar Block (U Kiel), Hubertus Thomas (DLR), Thomas Voigtmann (DLR), Hartmut Löwen (U Düsseldorf), Claus Lämmerzahl (ZARM, U Bremen)

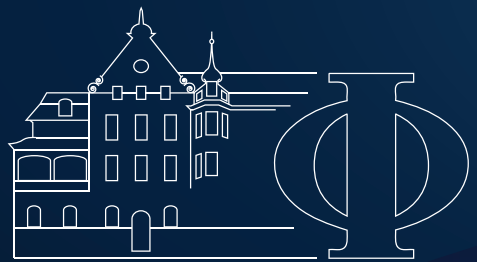
The fields of colloidal suspensions, complex plasmas, and ultra cold gases share a large fraction of general concepts. However, different notations, notably different particle-particle interactions, and sophisticated methods and techniques are an obstacle for young researchers to access and benefit from results obtained in the other fields. This school invites students and young researchers to go with us across subfield boundaries and learn how these research fields are interconnected. Introductory lectures in all three subfields with special emphasis on similarities and differences will found the basis to learn more about methods and techniques in all fields. If you have access to introductory courses to only one of these research fields at your university, this school is a unique opportunity to enlarge your research horizon. Each participant will be asked to present a poster on a method (theoretical or experimental) she or he uses or plans to use.

Topics and speakers

- Hubertus Thomas (DLR) - Complex Plasmas
- Peter Hartmann (Budapest) - Complex Plasmas I: Charging of Particles
- Andre Melzer (Greifswald) - Complex Plasmas II: Forces and Confinement
- Mierk Schwabe (DLR) - Complex Plasmas III: Dynamical Processes
- Stefan Egelhaaf (Düsseldorf) - Colloidal Dispersions
- Rene van Roij (Utrecht) - Colloidal Dispersions I: Charged Colloids
- Sabine Klapp (Berlin) - Colloidal Dispersions II: Driven Colloids
- Clemens Bechinger (Konstanz) - Colloidal Dispersions III: Self-propelled Colloids
- Ernst Rasel (Hannover) - Ultra-Cold Gases
- Axel Pelster (Kaiserslautern) - Ultra-Cold Gases I: The theory of cold atoms
- Tanja Mehlstäubler (Braunschweig) - Ultra-Cold Gases II: Ion crystals and their application
- Andreas Hemmerich (Hamburg) - Ultra-Cold Gases III: Cavities and optical lattices
- Silke Ospelkaus (Hannover) - Hot Topic I: The physics of cold molecules
- Daniela Kraft (Leiden) - Hot Topic II: Colloidal Molecules
- Markus Thoma (Giessen) - Hot Topic III: Polarity switching and rheology in complex plasmas

Fees:
Covering full board and lodging at the Physikzentrum Bad Honnef
200 € (for DPG members 100 €).

Application & more information: www.pbh.de



Physikzentrum Bad Honnef

Deutsche Physikalische Gesellschaft DPG

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