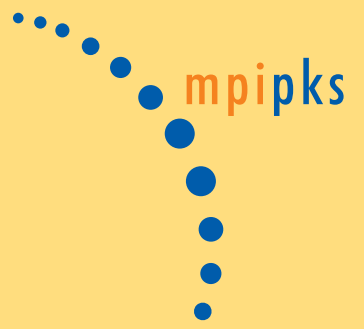




MAX-PLANCK-INSTITUT FÜR PHYSIK KOMPLEXER SYSTEME DRESDEN,
GERMANY



International Workshop

Spin-Orbit Interaction for Light and Matter Waves

15 - 19 April 2013

Scientific coordination

Jörg Götze

Max-Planck-Institut für Physik komplexer Systeme
Dresden, Germany

Andrea Aiello

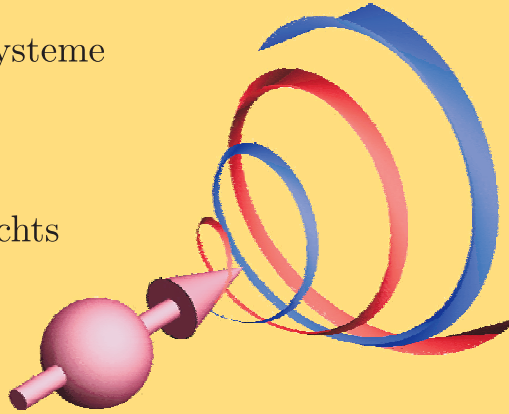
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Erlangen, Germany

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Organisation

Mandy Lochar

Spin-orbit interaction is a well-known phenomenon in atomic physics and condensed-matter science. It pertains to the coupling of the spin of any particle, for instance an electron, to its orbital or motional degrees of freedom. For photons, the spin and orbital degrees of freedom correspond respectively to the polarization and spatial structure of the light field. Combined high-precision control and manipulation of spin-orbit interactions is a recent experimental development which has wide ranging practical implications for various fields, such as optical scattering, light-particle interaction and trapping, optical quantum information, microscopy and metamaterials. The newly obtained findings and viewpoints stimulated research in different systems such as electron or neutron beams. The aim of the workshop is to deepen understanding in these interdisciplinary aspects and to explore future directions of the field as a whole.

List of invited speakers

David Andrews (UK)
Mohamed Babiker (UK)
Steve Barnett (UK)
Etienne Brasselet (France)
Mark Dennis (UK)
Aristide Dogariu (USA)
Vladimir Fedoseyev (Estland)
Sonja Franke-Arnold (UK)

Erez Hasman (Israel)
Maarten DeKieviet (Germany)
Lorenzo Marrucci (Italy)
Gabriel Molina-Terizza (Australia)
Gerard Nienhuis (Netherlands)
Miles Padgett (UK)
Jo Verbeek (Belgium)
Han Woerdman (Netherlands)

Applications for participation are welcome and should be made by using the application form on the event's web page (please see URL below). The number of attendees is limited. The **registration fee** for the event is **120 €** and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute for the Physics of Complex Systems. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

Deadline for registration is December 31, 2012.

For further information please contact:

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