

Nanoscale Assemblies of Semiconductor Nanocrystals, Metal Nanoparticles and Single Molecules

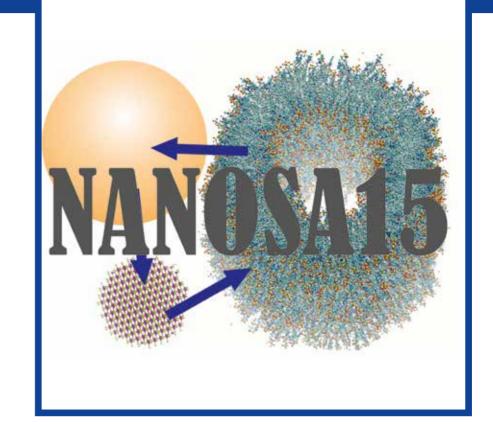


mpipks



International Workshop 24 - 28 August 2015

The workshop aims to cover cutting-edge research in the field of nanoscale physics with a focus on the physical and chemical properties of assemblies composed of nano-crystals, molecules, bio-molecules and polymers. One of the central ideas of the workshop is to bring together theoreticians and experimentalists and let them interact and exchange ideas. The topics to be addressed in the workshop will include, but not be limited to:



- Strategies and technologies of nano-assembly leading to complex geometries and novel properties
- Modern theoretical and computational approaches to complex hybrid nanoscale systems
- Migration and transfer of energy at the nanoscale, including FRET, tunneling transport and heat flow
- Optical properties of excitonic nanocrystals and their assemblies
- Plasmonic nanostructures with novel optical properties
- Hybrid structures with interacting exciton and plasmon resonances
- Coupling between molecules and nanocrystals
- Many-body effects in nanoscale systems that may control the assembly, chemistry and physical properties
- Bio-assemblies of nanocrystals based on polymers, involving DNAs, proteins and other molecules
- Schemes for functional nano-assemblies for solar energy harvesting, bio-sensing and other applications

Invited speakers

D. Andrienko (DE) A. Aspuru-Guzik (US)

N.-C. Bigall (DE)

S. Blumstengel (DE)

S.L. Brock (US)

I. Burghardt (DE)

H.V. Demir (SG)

A. Efros (US)

J. Garcia de Abajo (ES)

G.V. Hartland (US)

P. Hawrylak (CA)

S. Kirstein (DE)

V. Klimov (US)

A. Knorr (DE)

N. Leventis (US)

T. Lian (US)

T. Basché (DE)

G. Bryant (US)

M. Gao (CN)

H. Giessen (DE)

S. Gray (US)

E. Lifshitz (IL)

G. Lu (US)

Y. Luo (SE)

L. Manna (IT) S. Miao (CN)

J. Plain (FR)

O. Prezhdo (US)

J. Qiu (CN)

H.H. Richardson (US)

A. Rogach (HK)

G.C. Schatz (US)

T.J. Schmidt (CH)

Y. Selzer (IL)

A. Troisi (UK)

D. Vanmaekelbergh (NL)

D. Wang (CN)

G.P. Wiederrecht (US)

Scientific coordinators

Alexander Eychmüller Dresden, Germany

Alexander Govorov

Athens, USA

Volkhard May Berlin, Germany

Organisation

Katrin Lantsch, MPIPKS

Applications received before 31 May 2015 are considered preferentially.

Applications are welcome and should be made by using the application form on the workshop's web page. The number of attendees is limited. The registration fee for the international workshop is 120 Euro and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses. Please note that childcare is available upon request.

For further information please contact:

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