

Frontiers of Electronic Structure Theory: Many-body effects on the nano-scale

Symposium at the DPG Spring Meeting 2015 in Berlin

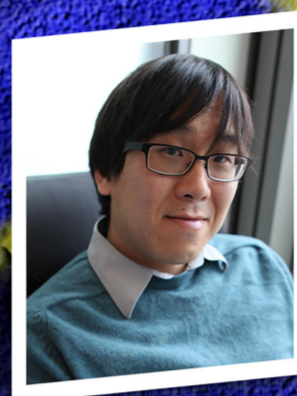
<http://th.fhi-berlin.mpg.de/meetings/DPGSym2015/>



**Roi
Baer**



**Mads
Brandbyge**



**Garnet
Chan**



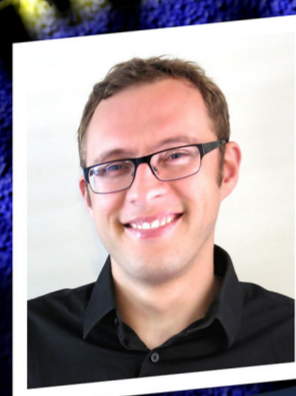
**Ralph
Gebauer**



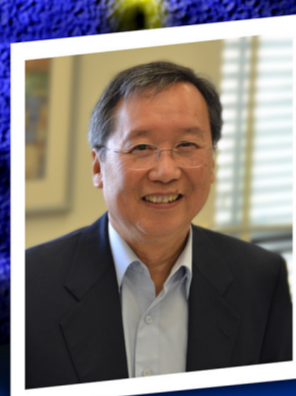
**Eberhard K. U.
Gross**



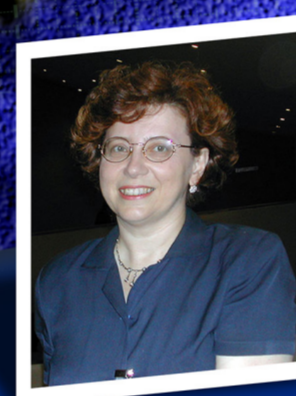
**Andreas
Grüneis**



**Johannes
Lischner**



**Steven G.
Louie**



**Elisa
Molinari**



**Carlo Andrea
Rozzi**



**Roser
Valenti**

Tuesday, March 17 - Friday, March 20 - TU Berlin

Invited and contributed talks, poster session

Tuesday, March 17 O19 10:30 a.m. - 1:30 p.m. (MA004)
 Tuesday, March 17 O26 2:00 p.m. - 3:45 p.m. (MA004)
 Wednesday, March 18 O47 10:30 a.m. - 1:30 p.m. (MA004)
 Wednesday, March 18 O56 3:00 p.m. - 6:30 p.m. (MA004)

Thursday, March 19 O78 10:30 a.m. - 1:15 p.m. (MA004)
 Thursday, March 19 O85 3:00 p.m. - 6:30 p.m. (MA004)
 Friday, March 20 O94 9:30 a.m. - 12:15 p.m. (H0105)

Eberhard K. U. Gross: Electronic structure in the vicinity of strong non-adiabatic couplings (Tuesday, 10:30 a.m.) • **Johannes Lischner:** First-principles theories of electron-plasmon and electron-spin fluctuation interactions in nanomaterials (Tuesday, 2:00 p.m.) • **Mads Brandbyge:** Transport and excitations in biased nano-junctions: DFT-based simulations (Wednesday, 10:30 a.m.) • **Carlo Andrea Rozzi:** Ultrafast coherent dynamics in photovoltaics (Wednesday, 3:00 p.m.) • **Steven G. Louie:** Interaction and correlation effects in quasi two-dimensional materials (Thursday, 10:30 a.m.) • **Ralph Gebauer:** Natural orbital functional theory with higher-order occupation probabilities (Thursday, 3:00 p.m.) • **Elisa Molinari:** Excitations and charge transfer phenomena in C based systems (Friday, 9:30 a.m.) • **Andreas Grüneis:** Towards optimal correlation factors for many-electron perturbation theories (Friday, 10:00 a.m.) • **Garnet Chan:** Towards an ab-initio description of high temperature super-conductivity (Friday, 10:30 a.m.) • **Roser Valenti:** Correlation effects in unconventional superconductors: from micro- to nano- and macroscales (Friday, 11:15 a.m.) • **Roi Baer:** Stochastic density functional and GW theories scaling linearly with system size (Friday, 11:45 a.m.)

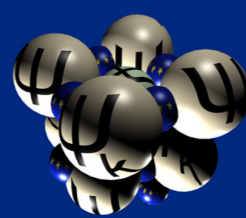
Posters related to the focused session will be presented at the poster sessions O67+O68:
 Wednesday, March 18, 6:15 p.m (poster area A)

Organized by Steven G. Louie¹⁾, Erich Runge²⁾, and Matthias Scheffler³⁾

¹⁾ University of California at Berkeley, California, USA

²⁾ Technische Universität Ilmenau, Ilmenau, Germany

³⁾ Fritz Haber Institute of the Max Planck Society, Berlin, Germany



European
Theoretical
Spectroscopy
Facility

The European Psi-k Network for electronic structure calculations
 invites all ab-initio scientists to a
"Psi-k Scientific Get-Together"
 Tuesday, 17 March 2015, 7:00 p.m. - 10:00 p.m.
 at Mensa, TU Berlin, Hardenbergstraße 34, 10623 Berlin
Food and beer will be served, sponsored by Psi-k