## Frontiers of Electronic Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond

Focussed Session at the DPG Spring Meeting 2017 in Dresden http://th.fhi-berlin.mpg.de/meetings/DPGSym2017/



March 19 - 24, 2017 • Dresden Poster sessions, invited and contributed talks

Submit an abstract for your contribution to this session until December 1, 2016 on the DPG homepage: https://www.dpg-tagung.de/dd17/submission.html

part: "O - Surface Science Devision", topic:

"Focus Session: Frontiers of Electronic-Structure Theory: New Concepts and Developments in Density Functional Theory and Beyond"

Notice that, while the invited lectures will have a focus on new concepts and developments in DFT and beyond,

the symposium will cover the general field of computational materials and electronic structure theory.

**Arun Bansil:** Topological phases of quantum matter: Success of DFT predictions • **Kieron Burke:** Strong correlation and density functional theory • **Paola Gori-Giorgi:** Approximate functionals from the strong-interaction limit of density functional theory • **Neepa Maitra:** Taming memory-dependence in time-dependent density functional theory • **Andreas Savin:** How any many-body method can use density functionals (without double counting) • **Kristian S. Thygesen:** Electronic and optical properties of two-dimensional materials from first principles • **Weitao Yang:** TBA • **Igor Ying Zhang:** Towards efficient orbital-dependent density functionals for weak and strong correlation

Organized by John Perdew<sup>1)</sup>, Angel Rubio<sup>2)</sup>, and Matthias Scheffler<sup>3)</sup>

1) Temple University, Philadelphia, USA

<sup>2)</sup> Max-Planck-Institut für Struktur und Dynamik der Materie, Hamburg, Germany
<sup>3)</sup> Fritz-Haber-Institut der Max-Planck-Gesellschaft, Berlin, Germany









