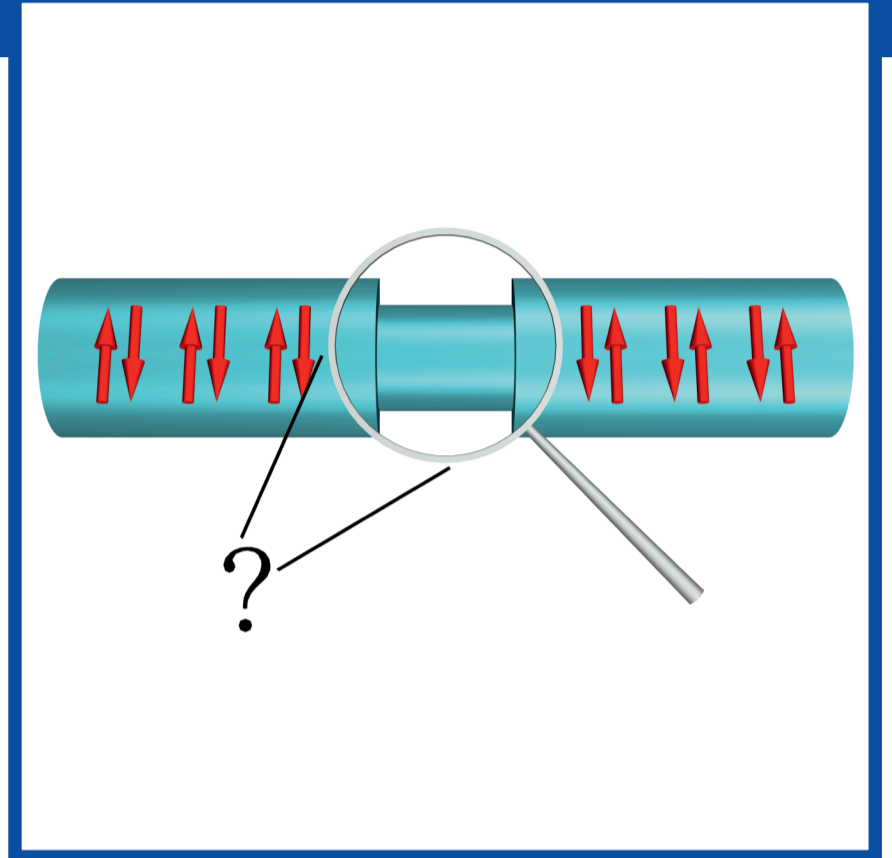




Bound states in superconductors and interfaces

International Focus Workshop 8 - 10 April 2019

Bound states appearing inside the energy gap of superconductors at impurities or interfaces give rise to many profound effects observable in the excitation and Josephson spectra. This workshop will bring together renowned experts in the field to discuss the state-of-the-art techniques and computational methods applicable for systems that are important for fundamental science and novel devices.



Topics

- materials, devices and spectroscopy of sub-gap states
- interplay of pairing and correlations in single and coupled impurities
- spin polarization and magnetic-field dependence
- role of spin-orbit interactions
- dynamical effects
- transport properties and persistent currents
- superconducting islands, Cooper boxes and topological Kondo effect
- spatial extent and directionality of Yu-Shiba-Rusinov states
- Andreev scattering

Invited speakers

S. Andergassen (DE)
 A. V. Balatsky (US)
 A. Baumgartner (CH)
 W. Belzig (DE)
 A. Black-Schaffer (SE)
 M. Choi (KR)
 T. Cren (FR)
 R. Deblock (FR)
 S. de Franceschi (FR)
 R. Egger (DE)
 J. König (DE)
 E. J. H. Lee (ES)
 R. Lutchyn (US)
 V. Meden (DE)
 R. Mélin (FR)
 T. Meng (DE)
 Y. V. Nazarov (NL)
 T. Novotný (CZ)
 J. Nygård (DK)
 J. Paaske (DK)

H. Pothier (FR)
 C. Strunk (DE)
 J. Wiebe (DE)
 C. B. Winkelmann (FR)
 A. L. Yeyati (ES)
 A. D. Zaikin (DE)

Scientific coordinators

Tadeusz Domanski
 Lublin, PL
 Katharina Franke
 Berlin, DE
 Rok Zitko
 Ljubljana, SI

Organisation

Jenny Kuehne
 MPIPKS Dresden

Applications received before 2 January 2019 are considered preferentially.

Applications are welcome and should be made by using the application form on the event's web page. The number of attendees is limited. The registration fee for the international focus workshop is 140 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.

For further information please contact:

Visitors Program – Jenny Kuehne
 MPI for the Physics of Complex Systems
 Nöthnitzer Str. 38, D-01187 Dresden
 Tel: +49-351-871-1934
 Fax: +49-351-871-2199
 bossa19@pks.mpg.de
 www.pks.mpg.de/bossa19/