



# Quantum Ferromagnetism and Related Phenomena

## International Workshop 6 - 10 May 2019

The ferromagnetic transition at zero temperature was the first quantum phase transition to be considered. It remains an active topic of research that also has led to the discovery of many unusual properties of the adjacent phases. This workshop will bring together leading researchers to discuss quantum ferromagnetism and its interplay with other types of order, in particular antiferromagnetism and superconductivity.



### Topics

- First-order vs continuous quantum phase transitions
- Competing orders in quantum magnets
- Quantum multicritical points
- Ferromagnetic superconductors
- Effects of quenched disorder
- Anomalous transport behavior in quantum magnets
- Quantum Griffiths effects
- Phase separation near first-order transitions
- Low-dimensional quantum magnets

### Invited speakers include

D. Aoki (JP)  
 D. Braithwaite (FR)  
 A. Chubukov (US)  
 A. de Visser (NL)  
 S. Friedemann (UK)  
 A. Green (UK)  
 M. Grosche (UK)  
 S. Hayden (UK)  
 K. Ishida (JP)  
 M. Janoschek (CH)  
 T.R. Kirkpatrick (US)  
 G. Knebel (FR)  
 H. Kotegawa (JP)  
 C. Krellner (DE)  
 F. Krüger (UK)  
 S.-S. Lee (CA)  
 M.B. Maple (US)  
 M.T. Mercaldo (IT)  
 E. Morosan (US)  
 P. Niklowitz (UK)  
 N. Perkins (US)

C. Pfleiderer (DE)  
 B.C. Sales (US)  
 A. Schroeder (US)  
 G.R. Stewart (US)  
 V. Taufour (US)  
 Y. Uemura (US)  
 M. Vojta (DE)  
 T. Vojta (US)  
 H. von Löhneysen (DE)  
 H. Yuan (CN)

### Scientific coordinators

Dietrich Belitz  
 Eugene, USA  
 Manuel Brando  
 Dresden, Germany  
 Andrew Huxley  
 Edinburgh, UK

### Organisation

Katrin Lantsch  
 MPIPKS Dresden

Applications received before 10 February 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 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:**  
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