



# FFLO-Phase in Quantum Liquids, Quantum Gases, and Nuclear Matter

## International Workshop 20 – 24 June 2016

The Fulde-Ferrell-Larkin-Ovchinnikov (FFLO) effect has enjoyed a lively and wide-ranged interest during the more than 50 years since its discovery. The range of fields where it has found applications includes superconductivity, spin-imbalanced cold fermionic gases, as well as in nuclear matter.

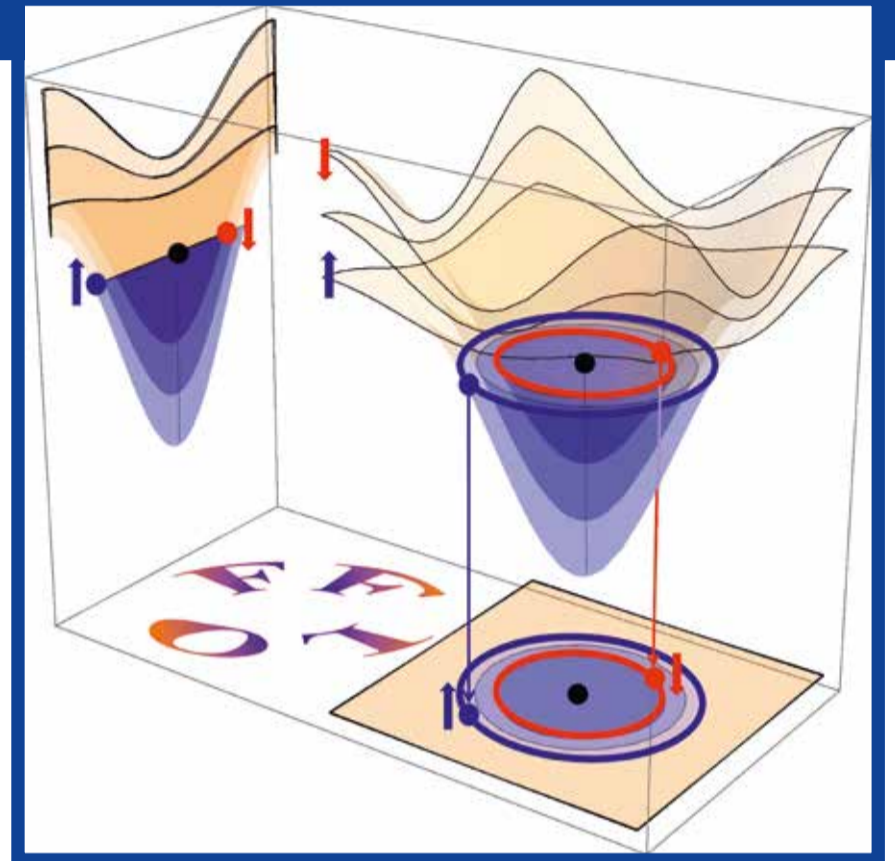
The FFLO state describes the appearance of Cooper pairs with a finite center of mass momentum as a result of a population imbalance of the fermions forming pairs. The imbalance can result, e.g., from a spin polarization due to an external or internal magnetic field, from Feshbach resonances, or from a difference in the chemical potential of up and down quarks. The aim of the workshop is to bring together the communities working on FFLO physics in the following systems:

- Heavy-fermion systems
- Neutron stars
- Nuclear matter
- Organic superconductors
- Spin-imbalanced cold atomic gases
- Spin-Peierls systems in magnetic fields
- Superconductor-ferromagnet hybrid systems

Applications received before 1 March 2016 are preferred.

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 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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### Invited speakers

C. Agosta (USA)  
D. Agterberg (USA)  
J. Annett (UK)  
G. Baym (USA)  
A. Bianchi (CA)  
M. Blamire (UK)  
S. Brazovskii (FR)  
J.P. Brison (FR)  
S. Brown (USA)  
L. Bulaevskii (USA)  
R. Casalbuoni (IT)  
M. Croitoru (BE)  
Y. Fominov (RU)  
J. Gukelberger (CA)  
H. Hu (AU)  
J. Linder (NO)  
K. Machida (JP)  
M. Mannarelli (IT)  
Y. Matsuda (JP)

A. Melnikov (RU)  
V. Mineev\* (FR)  
V. Mitrovic (USA)  
K. Rajagopal\* (USA)  
V. Ryazanov (RU)  
J. A. Sauls (USA)  
D. Scalapino\* (USA)  
A. Volkov\* (DE)  
S. Uji (JP)  
W. Zhang\* (CN)  
W. Zwerger (DE)  
G. Zwirner (DE)  
M. Zwerlein (USA)

\* not yet confirmed

### Special Guests

Peter Fulde (DE)  
Yurii Ovchinnikov (RU)

### Scientific coordinators

Alexander Buzdin (FR)  
Matthias Eschrig (UK)  
Joachim Wosnitza (DE)

### Organisation

Amy Wright, MPIPKS