Münchner Physik-Kolloquium Sommer 2018

High-temperature superconductivity: new insights and perspectives

Prof. Dr. Bernhard Keimer, *Max-Planck-Institut für Festkörperforschung, Stuttgart*

Monday, 25 June 2018, 17:15 h
Hörsaal 2, Physik-Department der TUM, Garching

Three decades after the discovery of high-temperature superconductivity, experimental advances yield surprising new insights [1]. Beginning with an elementary introduction to superconductivity, this colloquium will outline our current understanding of this phenomenon. We will then discuss the latest developments, with a focus on electronic collective modes detected by high-resolution neutron and x-ray spectroscopies, and on the discovery of charge order and its interplay with superconductivity. We will also discuss perspectives for controlled manipulation of high-temperature superconductors and other correlated-electron materials at interfaces and in electronic devices.

[1] For recent reviews, see B. Keimer et al., Nature 518, 179 (2015); B. Keimer and J.E. Moore, Nature Physics 13, 1045 (2017).

Student event: Meet the speaker

*We invite you to a **student-only** discussion-round with Prof. Dr. Bernhard Keimer before his Munich Physics Colloquium talk.*

Be curious and feel free to ask any question.

Monday, 25 June 2018, 16:00 h
Seminar room PH 3076 (upper floor), Physik-Department der TUM, James-Franck-Straße 1, Garching