

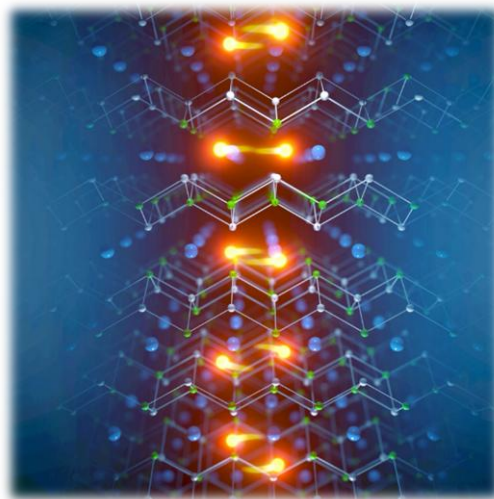
Einladung zum Physikalischen Kolloquium

12.06.2026 Elena Hassinger, Karlsruher Institut für Technologie

»Odd ways to unconventional superconductivity«

Einführung: M.M. Mühlleitner

Abstract: Superconductivity is a fascinating state of matter that transforms metals at very low temperature into perfect conductors and perfect diamagnets. Superconductivity with an antisymmetric wave function is interesting for its robustness to magnetic field and possible topological properties. But this state is extremely rare in nature with only a few material candidates. I will show how local asymmetry of the lattice in the compound CeRh₂As₂ leads to a phase transition between two superconducting states induced by magnetic field that is currently understood as a transition from a symmetric to an antisymmetric superconducting state. This unique phase diagram makes CeRh₂As₂ one of the few candidates of antisymmetric superconductors and a good study case from which we can learn more about unconventional superconductivity in general.



(Bild: Jörg Bandmann, pixelwg/ct.qmat)

Der Vortrag findet **am Freitag, den 12. Juni 2026 um 15:45 Uhr im Otto-Lehmann-Hörsaal**, Physik-Flachbau (Geb. 30.22), KIT-Campus Süd statt.