Contribution ID: **296** Type: **Poster**

【185】H_{c2} as a function of the order parameter in unconventional superconductors

Tuesday 5 September 2023 19:02 (1 minute)

The exact symmetries and form of the cooper pair wave function in many unconventional superconductors remains subject of ongoing debate. A possible way to shed some more light upon the matter is by explicitly computing thermodynamic properties given a functional form of the order parameter as well as a microscopic description of the normal state of a material. One such quantity is the upper critical field H_{c2}.
We develop a numerical pipeline interfacing between a normal-state description including a microscopic interaction and thermodynamic quantities such as the upper critical field. This allows us to draw conclusions on the microscopic structure of an unconventional superconductor considering its experimental H_{c2} signature.

Theoretical Work

Theory

Authors: LÜSCHER, Bernhard (Universität Zürich); FISCHER, Mark

Presenter: LÜSCHER, Bernhard (Universität Zürich)

Session Classification: Poster Session

Track Classification: Condensed Matter Physics (KOND)