

Modelling correlated Fe-based superconductors

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Correlations and competing magnetism are considered to be key ingredients of unconventional superconductivity in such systems as cuprates, organic charge transfer salts and iron pnictides and chalcogenides.

In this talk we will discuss correlations, magnetism and superconductivity in Fe-based superconductors by considering *ab initio* methods combined with many-body techniques and will present recent results [1-5] on FeSe and the newly discovered CaKFe₄As₄. Finally we will discuss ARPES, NMR and thermodynamic measurements.

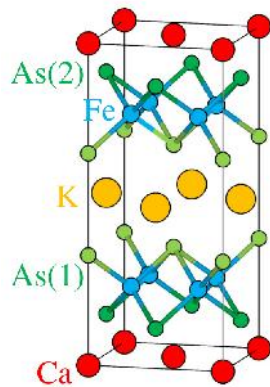


Figure. Crystal structure of CaKFe₄As₄.

References

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