

Abstract Submitted
for the MAR15 Meeting of
The American Physical Society

Correlation effects in KFe_2As_2 , RbFe_2As_2 and CsFe_2As_2 ¹ STEFFEN BACKES, HARALD O. JESCHKE, ROSER VALENTI, University Frankfurt — We perform a systematic LDA+DMFT study of the iron-pnictide series KFe_2As_2 ², RbFe_2As_2 and CsFe_2As_2 and compare with available experiments. We find not only strong orbital-dependent renormalizations and Fermi surface topology changes compared to the local-density approximation but also interesting features at higher binding energies. We discuss the observation of a possible orbitally-selective instability as a function of isoelectronic doping³.

¹Research funded within DFG SPP 1458.

²Backes *et al.*, New J. Phys. **16**, 083025 (2014)

³Backes *et al.*, in preparation

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Date submitted: 14 Nov 2014

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