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Nationality Spanish

Professional experience

2003-current Full professor (W3) for Theoretical Physics at Goethe-University, Frankfurt
2009-2012 Vice president of Goethe-University, Frankfurt
08.09-06.07 Director of the Institute for Theoretical Physics, Goethe-University
2002- 2009 Professor position offers: Univ. of Würzburg (2009), Univ. of Saarland (2004),
Univ. of Graz (2002)
2002 - 2003 Heisenberg Fellow of the DFG, University of Saarland
2000 - 2002 Research Assistant, Institute for Theoretical Physics, University of Saarland
1997- 2000 Habilitation-Fellow of the DFG, University of Saarland, University of Dortmund
1991 - 1997 Research Assistant, Institute for Physics II, University of Dortmund
1989 - 1991 Fulbright Postdoc Fellow, University of Florida, Gainesville (USA)

Academic qualifications

2000 Habilitation in theoretical physics, University of Dortmund
1989 PhD degree in Physics, University of Barcelona (UB)
1981-1986 Study of Physics, University of Barcelona (UB)

Research areas

Microscopic modelling of correlated electron systems;
Development of many-body approaches for correlated electron systems;
ab initio Density Functional Theory;
Unconventional superconductivity, nonreciprocal phenomena in magnetic systems;
Design and prediction of novel material properties.

5 selected recent publications

J.K. Glasbrenner, I. I. Mazin, H. O. Jeschke, P.J. Hirschfeld, R. Fernandes, R. Valentí
Effect of magnetic frustration on nematicity and superconductivity in Fe chalcogenides
Nature Physics **11**, 953 (2015)

U. Tutsch, B. Wolf, S. Wessel, L. Postulka, Y. Tsui, H. O. Jeschke, I. Opahle, T. Saha-Dasgupta, R.
Valentí, A. Bruehl, K. Removic-Langer, T. Kretz, H.-W. Lerner, M. Wagner, M. Lang
*Evidence of a field-induced Berezinskii–Kosterlitz–Thouless scenario in a two-dimensional spin–
dimer system*
Nature Communications **5**, 5169 (2014)

I. I. Mazin, H. O. Jeschke, F. Lechermann, H. Lee, M. Fink, R. Thomale, R. Valentí
Theoretical prediction of a strongly correlated Dirac metal
Nature Communications **5**, 4261 (2014)

S. A. J. Kimber, A. Kreyssig, Y. Z. Zhang, H. O. Jeschke, R. Valentí, F. Yokaichiya, E. Colombier,
J. Yan, T. C. Hansen, T. Chatterji, R. J. McQueeney, P. C. Canfield, A. I. Goldman and D. N. Argyriou
*Similarities between structural distortions under pressure and chemical doping in superconducting
BaFe₂As₂*
Nature Materials **8**, 471 (2009)

A. Ruff, M. Sing, R. Claessen, H. Lee, M. Tomić, H. O. Jeschke, R. Valentí
Absence of metallicity in K-doped picene: Importance of electronic correlations
Phys. Rev. Lett. **110**, 216403 (2013)

