Prof. Jan von Delft

Areas of expertise: Correlated Electrons, Tensor Networks

Affiliation:	Department of Physics, LMU Munich
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Date of Birth:	25.10.1967
Citizenship:	German
ResearcherID/ORCID:	6701504669
Publication Record:	129 publications, 4366 citations, h-index 37

Professional Experience and Positions

2001 – today	Professor of Physics (C4) Department of Physic, LMU, Germany
2000 – 2001	Professor of Physics (C3) Department of Physics, Bonn University, Germany
1995 – 2000	Postdoctoral assistant Department of Physics, Karlsruhe, Germany

Education

1990 – 1995	PhD, Theoretical Physics, Department of Physics, Cornell University Supervisor: Vinay Ambegaokar
1988 – 1990	Study of Theoretical Physics, Honors & Master, Department of Physics University of Stellenbosch, South Africa
1985 – 1987	Study of Physics and Mathematics, Bachelor University of the Orange Free State, South Africa
1984	Matriculation, Grey-College, Bloemfontein, South Africa

Fellowships & Awards

2000	Heinrich-Hertz Prize of the Badenwerkstiftung, Germany (with G. Schön and H. Schoeller)

Commissions Of Trust & Memberships

2001 – today	Member of the Center for NanoScience, LMU Munich
2001 – 2006	Coordinator of the EU-funded *Spintronics* Research Training Network
2003 – 2015	Vice coordinator of the Cooperative Research Center SFB 631 on *Quantum Information Processing with Solid State Systems*
2004 – 2005	Director, Department of Physics
2004 – today	Founding member of the Arnold-Sommerfeld-Center for Theoretical Physics
2006 – today	Member of steering committee of the Bavarian Elite Master Program Theoretical and Mathematical Physics, run jointly by the LMU and TUM
2015 – today	Member of the Munich Quantum Center
2016 – 2017	Member of the steering committee of the International Max Planck Research School on *Quantum Science and Technology*

Selected Publications

(1) Dynamical Mean-Field Theory Plus Numerical Renormalization-Group Study of Spin-Orbital Separation in a Three-Band Hund Metal
K. M. Stadler, Z. P. Yin, J. von Delft, G. Kotliar, A. Weichselbaum
Phys. Rev. Lett. **115**, 136401 (2015)

(2) Microscopic Origin of the 0.7-Anomaly in Quantum Point Contacts
F. Bauer, J. Heyder, E. Schubert, D. Borowsky, D. Taubert, B. Bruognolo, D. Schuh, W. Wegscheider, J. von Delft, S. Ludwig
Nature **501**, 73 (2013)

(3) Quantum quench of Kondo correlations in optical absorption
C. Latta, F. Haupt, M. Hanl, A. Weichselbaum, M. Claassen, W. Wuester, P. Fallahi, S. Faelt, L. Glazman, J. von Delft, H. E. Türeci, A. Imamoglu
Nature **474**, 627 (2011)

(4) Variational matrix-product-state approach to quantum impurity models
A. Weichselbaum, F. Verstraete, U. Schollwöck, J. I. Cirac, J. von Delft
Phys. Rev. B **80**, 165117 (2009)

(5) Influence Functional for Decoherence of Interacting Electrons in Disordered Conductors
J. von Delft
International Journal of Modern Physics B **22**, 727 (2008).

(6) Sum-Rule Conserving Spectral Functions from the Numerical Renormalization Group
A. Weichselbaum, J. von Delft
Phys. Rev. Lett. **99**, 076402 (2007)

(7) Kondo Effect in the Presence of Itinerant-Electron Ferromagnetism Studied with the Numerical Renormalization Group Method
J. Martinek, M. Sindel, L. Borda, J. Barnas, J. König, G. Schön, J. von Delft
Phys. Rev. Lett. **91**, 247202 (2003)

(8) Spectroscopy of Discrete Energy Levels in Ultrasmall Metallic Grains
J. von Delft, D. C. Ralph
Physics Reports **345**, 61 (2001)

(9) Bosonization for Beginners - Refermionization for Experts
J. von Delft, H. Schoeller
Annalen der Physik, **7**, 225 (1998)

(10) Destructive Quantum Interference in Spin Tunneling Problems
J. von Delft, C. L. Henley
Phys. Rev. Lett. **69**, 3236 (1992)