

LIST OF PUBLICATIONS

Prof. Dr. Jörg Schmalian

Karlsruhe Institute of Technology
Institute for Theory of Condensed Matter and
Institute for Quantum Materials and Technologies
Email: joerg.schmalian@kit.edu | Telephone: +49 721 608 43590 | [webpage](#)

Total number of publications: 235 publications in peer-reviewed journals, including 51 in Physical Review Letters, 106 in Physical Review, 24 in Nature + Science Journals, 4 in PNAS. 6 popular science articles, and 5 book chapters.

Citations: h-index = 59 (Web of Science), 67 (Google scholar), total citations 12300 (Web of Science), 17900 (Google scholar)

Invited talks: 410 invited talks at conferences and colloquia at universities not counting seminar talks.

LIST OF POPULAR SCIENCE ARTICLES

1. Hydrodynamische Elektronik, Yearbook of the Heidelberg Academy of Sciences (2021) [in German]
2. *Elastisch dank einflussreicher Elektronen: In einem kritischen, stark korrelierten System sind Kraft und Auslenkung nirgends proportional*, J. Schmalian, [Physik Journal 16, 24 \(2017\)](#) [in German].
3. *Superconductivity: a Superlatively Difficult Puzzle*, The SPS-Observer; The Magazine of the Society of Physics Students of the American Institute of Physics, [Spring Issue](#) (2017).
4. *Elektronen im Fluss: In Graphen können Elektronen auch hydrodynamisches Verhalten zeigen*, A. D. Mirlin und J. Schmalian, [Physik Journal 15, \(2016\)](#) [in German].
5. *Supraleitung: Unkonventionell und Komplex*, J. Schmalian, [Physik Journal 10, 37 \(2011\)](#) [in German].
6. *Failed Theories of Superconductivity*, J. Schmalian, chapter IV in: BCS: 50 Years, Ed. D. Feldman and L. N Cooper, [World Scientific \(2010\)](#), [arXiv:1008.0447](#). **Featured by Mark Buchanan in: The winner takes it all? Nature Physics 6, 715 (2010)**

LIST OF BOOK CHAPTERS

1. Interface Superconductivity in [Handbook of Superconductivity Fundamentals and Materials, Vol. One](#), ed. D. A. Cardwell, D. C. Larbalestier, A. Braginski, Taylor and Francis (2021).
2. *Interface Superconductivity*, S. Gariglio, M. Scheurer, J. Schmalian, A.M.R.V.L. Monteiro, S. Goswami, A. Caviglia, [Chapter 7 in Small Superconductors](#), ed. A.V. Narlikar, Clarendon Press- Oxford (2016).
3. *Nematic Order and Fluctuations in Iron-Based Superconductors*, U. Karahasanović, R. M. Fernandes and J. Schmalian, Lectures on the physics of strongly correlated systems XIX: Nineteenth training course in the physics of strongly correlated systems, ed. R. Citro and F. Manchini, [AIP-Conference Proceedings \(2016\)](#).
4. *A spin fluctuation model for d-wave superconductivity*, A. V. Chubukov, D. Pines, J. Schmalian, [Novel Superconductors Vol. II](#), ed. K. H. Bennemann, J. B. Ketterson, Springer (2008), [arXiv:cond-mat/0201140](#).
5. *Materials driven Science: from high- T_c to complex adaptive matter*, J. Schmalian and D. Pines, [Proceedings of the NATO Advanced Study Institute conference on Soft Condensed Matter: Configurations, Dynamics and Functionality](#), April 6-16, 1999, Geilo, Norway (1999).

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2. N. Bashan, E. Tulipman, J. Schmalian, and E. Berg, Tunable Non-Fermi Liquid Phase from Coupling to Two-Level Systems, [Phys. Rev. Lett. 132, 236501 \(2024\)](#), [arXiv:2310.07768](#).
3. H. Guo, D. Valentinis, J. Schmalian, S. Sachdev, and A. A. Patel, Cyclotron resonance and quantum oscillations of critical Fermi surfaces, [Phys. Rev. B 109, 075162 \(2024\)](#), [arXiv:2308.01956](#).
4. G. Baker, T. W. Branch, J. S. Bobowski, J. Day, D. Valentinis, M. Oudah, P. McGuinness, S. Khim, P. Surówka, Y. Maeno, T. Scaffidi, R. Moessner, J. Schmalian, A. P. Mackenzie, and D. A. Bonn, Nonlocal Electrodynamics in Ultrapure PdCoO₂, [Phys. Rev. X 14, 011018 \(2024\)](#), [arXiv:2204.14239](#).
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9. G. Palle, C. Hicks, R. Valentí, Z. Hu, Y.-S. Li, A. Rost, M. Nicklas, A. P. Mackenzie, J. Schmalian, Constraints on the superconducting state of Sr₂RuO₄ from elastocaloric measurements, [Phys. Rev. B 108, 094516 \(2023\)](#).
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49. Intertwined Vestigial Order in Quantum Materials: Nematicity and Beyond, R. M. Fernandes, P. P. Orth, and J. Schmalian, [Annual Review of Condensed Matter Physics **10**, 133 \(2019\)](#), [arXiv:1804.00818](#).
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