LIST OF PUBLICATIONS

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Total number of publications: 221 publications in peer-reviewed journals, including 50 in Physical Review Letters, 99 in Physical Review, 20 in Nature Journals, 4 in PNAS. 6 popular science articles, and 5 book chapters.

Citations: h-index = 57 (Web of Science), 67 (Google scholar), total citations 11500 (Web of Science), 16800 (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).
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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).

LIST OF PEER-REVIEWED PUBLICATIONS

1. A. Reich, E. Berg, J. Schmalian, and A. Shnirman, *Magnetization dynamics and Peierls instability in topological Josephson structures,* Phys. Rev. B **107**, 245411 (2023) arXiv:2303.08321.
2. M. Hecker, R. Willa, J. Schmalian, and R. M. Fernandes, *Cascade of vestigial orders in two-component superconductors: Nematic, ferromagnetic, s-wave charge-4e, and d-wave charge-4e states*, Phys. Rev. B **107**, 224503 (2023) arXiv:2303.00653.
3. D. Valentinis, G. Baker, D. A. Bonn, and J. Schmalian, *Kinetic theory of the nonlocal electrodynamic response in anisotropic metals: Skin effect in 2D systems*, Phys. Rev. Research **5**, 013212 (2023) arXiv:2204.13344 .
4. G. F. Rodríguez Ruiz, M. A. Rampp, A. A. Aligia, J. Schmalian, and L. Arrachea, *Josephson junctions of two-dimensional time-reversal invariant superconductors: Signatures of the topological phase* Phys. Rev. B **106**, 195415 (2022) arXiv:2205.14993.
5. C.-w. Cho, J. Lyu, L. An, T. Han, K. T. Lo, C. Y. Ng, J. Hu, Y. Gao, G. Li, M. Huang, N. Wang, J. Schmalian, and R. Lortz, *Nodal and Nematic Superconducting Phases in $NbSe_2$ Monolayers from Competing Superconducting Channels*, Phys. Rev. Lett. **129**, 087002 (2022); arXiv:2003.12467.
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7. Y. Yao, R. Willa, T. Lacmann, S.-M. Souliou, M. Frachet, K. Willa, M. Merz, F. Weber, Ch. Meingast, R. Heid, A.-A. Haghighirad, J. Schmalian, and M. Le Tacon, *An electronic nematic liquid in $BaNi_2As_2$*, Nature Communications **13**, 4535 (2022); arXiv:2207.03161.
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