

**PEER-REVIEWED PUBLICATIONS**

- [1] **Modic, K. A.**, Ross D. McDonald, J. P. C. Ruff, Maja D. Bachmann, You Lai, Johanna C. Palmstrom, David Graf, Mun Chan, F. F. Balakirev, J. B. Betts, G. S. Boebinger, Marcus Schmidt, Michael J. Lawler, D. A. Sokolov, Philip J. W. Moll, B. J. Ramshaw, and Arkady Shekhter. Scale-invariant magnetic anisotropy in  $\text{RuCl}_3$  at high magnetic fields. *arXiv:1901.09245*, to appear in *Nature Physics*, 2020. URL <https://arxiv.org/abs/2005.04228>
- [2] Máté Hartstein, Yu-Te Hsu, **Modic, Kimberly A.**, Juan Porras, Toshinao Loew, Matthieu Le Tacon, Huakun Zuo, Jinhua Wang, Zengwei Zhu, Mun K Chan, Ross D. McDonald, Gilbert G. Lonzarich, Bernhard Keimer, Suchitra E. Sebastian, and Neil Harrison. Hard antinodal gap revealed by quantum oscillations in the pseudogap regime of underdoped high- $T_c$  superconductors. *NATURE PHYSICS*, 16: 841–847, 2020. doi:[10.1038/s41567-020-0910-0](https://doi.org/10.1038/s41567-020-0910-0)
- [3] Sayak Ghosh, Michael Matty, Ryan Baumbach, Eric D. Bauer, **Modic, K. A.**, Arkady Shekhter, J. A. Mydosh, Eun-Ah Kim, and B. J. Ramshaw. Single-component order parameter in  $\text{URu}_2\text{Si}_2$  uncovered by resonant ultrasound spectroscopy and machine learning. *SCIENCE ADVANCES*, 6(10), 2020. doi:[10.1126/sciadv.aaz4074](https://doi.org/10.1126/sciadv.aaz4074)
- [4] M. Naumann, F. Arnold, M. D. Bachmann, **Modic, K. A.**, P. J. W. Moll, V. Süß, M. Schmidt, and E. Hassinger. Orbital effect and weak localization in the longitudinal magnetoresistance of Weyl semimetals NbP, NbAs, TaP and TaAs. *PHYSICAL REVIEW MATERIALS*, 4(3):034201, 2020. doi:[10.1103/PhysRevMaterials.4.034201](https://doi.org/10.1103/PhysRevMaterials.4.034201)
- [5] Nicholas P. Breznay, Ian M. Hayes, Nityan L Nair, Toni Helm, James G. Analytis, Ross D. McDonald, Zengwei Zhu, Yoshiharu Krockenberger, Hiroshi Irie, Hideki Yamamoto, **Modic, K. A.**, Alex Frano, Padraic Shafer, and Elke Arenholz. Interplay of structure and charge order revealed by quantum oscillations in thin films of  $\text{Pr}_2\text{CuO}_{4\pm\delta}$ . *PHYSICAL REVIEW B*, 100(23):235111, 2019. doi:[10.1103/PhysRevB.100.235111](https://doi.org/10.1103/PhysRevB.100.235111)
- [6] Maja D. Bachmann, G. M. Ferguson, Florian Theuss, Tobias Meng, Carsten Putzke, Toni Helm, K. R. Shirer, You-Sheng Li, **Modic, K. A.**, Michael Nicklas, Markus König, D. Low, Sayak Ghosh, Andrew P. Mackenzie, Frank Arnold, Elena Hassinger, Ross D. McDonald, Laurel E. Winters, Eric D. Bauer, Filip Ronning, B. J. Ramshaw, Katja C. Nowack, and Philip J. W. Moll. Spatial control of heavy-fermion superconductivity in  $\text{CeIrIn}_5$ . *SCIENCE*, 366(6462):221–226, 2019. doi:[10.1126/science.aa06640](https://doi.org/10.1126/science.aa06640)
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- [9] **Modic, K. A.**, Tobias Meng, Filip Ronning, Eric D. Bauer, Philip J. W. Moll, and B. J. Ramshaw. Thermodynamic Signatures of Weyl Fermions in NbP. *SCIENTIFIC REPORTS*, 9(2095), 2019. ISSN 2045-2322. doi:[10.1038/s41598-018-38161-7](https://doi.org/10.1038/s41598-018-38161-7)

- [10] **Modic, K. A.**, B. J. Ramshaw, A. Shekhter, and C. M. Varma. Chiral spin order in some purported Kitaev spin-liquid compounds. *PHYSICAL REVIEW B*, 98(205110), 2018b. ISSN 2469-9950. doi:[10.1103/PhysRevB.98.205110](https://doi.org/10.1103/PhysRevB.98.205110)
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- [13] P. Giraldo-Gallo, J. A. Galvis, Z. Stegen, **Modic, K. A.**, F. F. Balakirev, J. B. Betts, X. Lian, C. Moir, S. C. Riggs, J. Wu, A. T. Bollinger, X. He, I. Bozovic, B. J. Ramshaw, R. D. McDonald, G. S. Boebinger, and A. Shekhter. Scale-invariant magnetoresistance in a cuprate superconductor. *SCIENCE*, 361(6401): 479–481, 2018. ISSN 0036-8075. doi:[10.1126/science.aan3178](https://doi.org/10.1126/science.aan3178)
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