

# Publications

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37. F. Theuss, A. Shragai, G. Grissonnanche, L. Peralta, I. M. Hayes, S. R Saha, Y. S. Eo, A. Suarez, A. C. Salinas, **G. Pokharel**, S. D. Wilson, N. P. Butch, J. Paglione, and B. J. Ramshaw, Absence of a Bulk Thermodynamic Phase Transition to a Density Wave Phase in  $\text{UTe}_2$ , *Phys. Rev. B* 110, 144507, 2024. (Published as an Editor's suggestion).  
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36. S. J. Gomez Alvarado, **G. Pokharel**, B. R. Ortiz, J. A. M. Paddison, S. Sarker, J. P. C. Ruff, and Stephen D. Wilson, Frustrated Ising charge correlations in the kagome metal  $\text{ScV}_6\text{Sn}_6$ , *Phys. Rev. B (Letter)* 110, L140304, 2024.  
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35. H. S. Arachchige, L. M. DeBeer-Schmitt, L. L. Kish, B. K. Rai, A. F. May, D. S. Parker, **G. Pokharel**, Wei Tian, D. G. Mandrus, S. M. Thomas, P. F. S. Rosa, J. D. Thompson, S. Z. Lin, and A. D. Christianson, Nanometric modulations of the magnetic structure of the element Nd, *Materials Today Quantum*, 100016, 2024.  
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33. H. Li, S. Cheng, **G. Pokharel**, P. Eck, C. Bigi, F. Mazzola, G. Sangiovanni, S. D. Wilson, D. D. Sante, Z. Wang and I. Zeljkovic, Discovery of enormous orbital magnetic moments induced by finite Berry curvature in a kagome metal  $\text{TbV}_6\text{Sn}_6$ , *Nat. Phys.* 20, 1103–1109, 2024.  
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32. B. R. Ortiz, P. M. Sarte, **G. Pokharel**, M. J. Knudston, S. J. Gomez, A. F. May, S. Calder, L. Mangin-Thro, A. R. Wildes, H. D. Zhou, G. Sala, C. R. Wiebe, S. D. Wilson, J. A. M. Paddison, and A. A. Aczel, Revisiting spin ice physics in the ferromagnetic Ising pyrochlore  $\text{Pr}_2\text{Sn}_2\text{O}_7$ , *Phys. Rev. B* 109, 134420, 2024.  
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31. S. J. Gomez Alvarado, E. Zoghlin, A. Jackson, L.s Kautzsch, J. Plumb, M. Aling, A. C. Salinas, **G. Pokharel**, Y. Pang, R. M. Gomez, and S. D. Wilson, LOKII project: Advances in high-pressure laser floating zone growth, *Rev. Sci. Instrum.* 95, 033903, 2024.  
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30. S. Cheng, Z. Ren, H. Li, J. Oh, H. Tan, **G. Pokharel**, J. Destefano, E. Rosenberg, Y. Guo, Y. Zhang, Z. Yue, Y. Lee, S. Gorovikov, M. Zonno, M. Hashimoto, D. Lu, L. Ke, F. Mazzola, J. Kono, R. J. Birgeneau, J. H. Chu, S. D. Wilson, Z. Wang, B. Yan, M. Yi, and I. Zeljkovic, Nanoscale visualization and spectral fingerprints of the charge order in  $\text{ScV}_6\text{Sn}_6$  distinct from other kagome metals, *npj Quantum Mater.* 9, 14, 2024 .  
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## Manuscripts under Review

7. C. Bigi, M. D'urnnagel, L. Klebl, A. Consiglio, **G. Pokharel**, F. Bertran, P. Le F'evre, A. Vita, J. A. Miwa, J. W. Wells, R. Comin, R. Thomale, I. Zeljkovic, B. R. Ortiz, S. D. Wilson, G. Sangiovanni, F. Mazzola, and D. Di Sante, Pomeranchuk instability from electronic correlations in  $\text{CsTi}_3\text{Bi}_5$  kagome metal, submitted for publication (Under review).
6. F. Mazzola, W. Brzezicki, C. Bigi, A. Consiglio, L. Jacopo D'Onofrio, M. T. Mercaldo, A. Kłosiński, F. Lois Bertran, P. Le F'evre, O. J. Clark, M. Tuniz, A. De Vita, V. Polewczyk, J. B. Jacobsen, H. Jacobsen, J. A. Miwa, J. W. Wells, A. Jana, I. Vobornik, J. Fujii, G. Sangiovanni, S. Sanna, P. Bonfa, B. R. Ortiz, **G. Pokharel**, S. D. Wilson, D. Di Sante, C. Ortix, and M. Cuoco, Anomalous spin-optical chiral effect in Ti-based kagome metal, submitted for publication (Under review).
5. J. Zheng, C. Chen, G. Pan, X. Zhang, C. Chen, Y. Liao, **G. Pokharel**, A. Salinas, Y. Wei, H. C. Po, D. Pan, S. Wilson, Z. Y. Meng, and B. Jäck, Visualizing Loop Current Excitations, submitted for publication (Under review).
4. C. Phillips, K. Shtefienko, T. Nguyen, A. N. C. Salinas, B. A. Magar, Y. Wang, **G. Pokharel**, D. Popović, S. D. Wilson, D. E. Graf, and K. Shrestha, Fermi surface reconstruction under pressure in kagome metal  $\text{CsV}_3\text{Sb}_5$ , submitted for publication (Under review).
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1. Y. Chen, T. Kongruengkit, A. C. Salinas, R. Yang, Y. Quan, F. Zhang, **G. Pokharel**, L. Kautzsch, S. Mu, S. D. Wilson, J. W. Harter, and Bolin Liao, Absence of Phonon Softening across a Charge Density Wave Transition due to Quantum Fluctuations, submitted for publication (Under review).