

## Short Curriculum Vitae

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### (A) Education and Training

Institution	Area of Study	Year	Degree/Position
University of Chicago	Physics	1999-2004	PhD

### (B) Research and Professional Experience

Year	Position	Institution
2019 - present	Associate Professor	University of Colorado Boulder, CO
2010 - 2019	Assistant Professor	University of Colorado Boulder, CO
2007 – 2010	Research Associate	NIST Boulder, CO
2004 - 2007	Postdoctoral Fellow	Princeton University, NJ

**(C) Fields of Specialty:** Experimental Condensed matter physics, Quantum Magnetism, High Magnetic Field and High Pressure Experiments, Low temperature Electrical and Thermal Transport study, Cantilever-based magnetometry, single crystal synthesis

### (D) Selected Recent Publications

1. C. A. Pocs, I. A. Leahy, J. Xie, Eun-Sang Choi, A. S. Sefat, M. Hermele, and Minhyea Lee, “Generic magnetic field dependence of thermal conductivity in effective spin-1/2 magnetic insulator via hybridization of acoustic phonons and spin-flip excitations”, arXiv:2401.01407(2024).
2. K. Feng, C. Bush, O. Oladehin, Minhyea Lee and R. Baumbach, “Complex Antiferromagnetic order in the metallic triangular lattice compound  $\text{SmAuAl}_4\text{Ge}_2$ ”, Phys. Rev. B (in press), arXiv:2308.13945
3. J. N. Nelson, I. A. Leahy, A. D. Rice, C. Brooks, G. Teeter, M. v. Schilfgaarde, S. Lany, B. Fluegel, Minhyea Lee, K. Alberi, “Direct link between disorder and magnetoresistance in topological semimetals”, Phys. Rev. B **107**, L220206 (2023).
4. K. Feng, I. A. Leahy, O. Oladehin, K. Wei, Minhyea Lee and R. Baumbach, “Magnetic ordering in  $\text{TbAuAl}_4\text{Ge}_2$  and  $\text{TbAuAl}_4\text{Ge}_2$ : Layered compounds with triangular lanthanide nets”, J. Mag. Mag. Mater. **564**, 170006 (2022).
5. I. A. Leahy, K. Feng, R. Dery, R. Baumbach and Minhyea Lee, “Field-induced magnetic states in the metallic rare-earth layered triangular antiferromagnet  $\text{TbAuAl}_4\text{Ge}_2$ ”, Phys. Rev. B **106**, 094426 (2022).
6. C. A. Pocs, P.E. Siegfried, J. Xie, A. S. Sefat, M. Hermele, B. Normand and Minhyea Lee, “Extracting quantum magnetic model parameters in a triangular rare-earth magnet: systematic characterization of crystal electric field effects from magnetic susceptibility and resonant torsion magnetometry”, Phys. Rev. Research **3**, 043202 (2021)

7. C. A. Pocs, I. A. Leahy, H. Zheng, Gang, Cao, Eun-Sang Choi, S.-H. Do, Kwang-Young Choi, B. Normand and Minhyea Lee, "Giant thermal magnetoconductivity in CrCl<sub>3</sub> and a general model for spin-phonon scattering", *Phys. Rev. Research* **2**, 013059 (2020).
8. G. Cao, H. Zheng, H. Zhao, Y. Ni, C. A. Pocs, Y. Zhang, F. Ye, C. Hoffmann, X. Wang, Minhyea Lee, M. Hermele, I. Kimchi, "Quantum liquid from strange frustration in the trimer magnet Ba<sub>4</sub>Ir<sub>3</sub>O<sub>10</sub>", *npj Quantum Materials* **5**, 26 (2020)
9. T. T. Tran, Y. Zhang, C. A. Pocs, M. J. Winiarski, J. Sun, Minhyea Lee and T. M. McQueen, "Spinon excitations in the quasi-1D S=1/2 Chain Cs<sub>4</sub>CuSb<sub>2</sub>Cl<sub>12</sub>", *Phys.Rev.B* **101**, 235107 (2020).
10. I. A. Leahy, Yu-Ping Lin, P. E. Siegfried, A. C. Treglia, J. C. W. Song, R. M. Nandkishore and Minhyea Lee, "Non-saturating large magnetoresistance in semimetals", *Proc. Nat. Acad. Sci.* **115**, 10570 (2018).

**(E) Other Profession Services and awards**

- Department of Energy Early Career Award (2011)
- National High Magnetic Field Lab User committee (2022-2024)
- National High Magnetic Field Lab User Research Collaboration Program Committee (2017- 2020, 2023-2026)
- Program committee of APS 4Corners meeting (2021)
- Executive committee for APS Conference for Undergraduate Women in Physics (2017)
- Journal referee for scientific publications including Applied Physics Letters Journal of Magnetism and Magnetic Materials, Journal of Physics, Physical Review B, Physical Review Letters, Nano Letters, Nature, Nature Materials, Nature Nanotechnology, Nature Physics, Science, and Science Advance,
- Grant reviewer for federal and international funding agencies.