

Biographical Sketch

Name: Minhyea Lee

Title: Associate Professor

Affiliation: Department of Physics, University of Colorado Boulder, Boulder CO 80309

Contacts: (Phone) 303-492-1440, (Email) minhyea.lee@colorado.edu

(A) Education and Training

Institution	Area of Study	Year	Degree
University of Chicago, IL	Physics	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 - 2009	Research Associate	NIST Boulder, CO
2004 - 2007	Postdoctoral Fellow	Princeton University, NJ

(C) Selected Recent Publications

1. Minhyea Lee, “News and Views: Disordered exchange is biased”, *Nat. Phys.*, doi:10.1038/s41567-020-01127-6, (2021).
2. J. S. You, M. J. Eom, Minhyea Lee, Y. J. Jo, C. J. Won, S.-W Cheong, Kyoo Kim and Jun Sung Kim, “Thermoelectric properties of the stripe-charge ordering phases in IrTe₂”, *Phys. Rev. B* **103**, 045102 (2021)
3. 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 CrCl₃ and a general model for spin-phonon scattering”, *Phys. Rev. Research* **2**, 013059 (2020).
4. Gang Cao, Hao Zheng, Hengdi Zhao, Yifei Ni, C. A. Pocs, Yu Zhang, Feng Ye, Christina Hoffmann, Xiaoping Wang, Minhyea Lee, Michael Hermele, Itamar Kimchi, “Quantum liquid from strange frustration in the trimer magnet Ba₄Ir₃O₁₀”, *npj Quantum Materials* **5**, 26 (2020)
5. 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 Cs₄CuSb₂Cl₁₂”, arXiv:1907.02847v2.
6. I. A. Leahy, C. A. Pocs, P. E. Siegfried, D. Graf, S. -H. Do, K.-Y. Choi, B. Normand and Minhyea Lee, “Anomalous thermal conductivity and magnetic torque response in magnetic torque response in the honeycomb magnet α -RuCl₃”, *Phys. Rev. Lett.* **118**, 187203 (2017).
7. 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).

8. P. E. Siegfried, A. C. Bornstein, A. C. Treglia, T. Wolf and Minhyea Lee, "Multiple magnetic states within the A-Phase: Angular dependence Study of $\text{Mn}_{0.9}\text{Fe}_{0.1}\text{Si}$ ", *Phys. Rev. B* **96**, 220410(R) (2017).
9. T. Goko, C. A. Arguello, A. Hamann, T. Wolf, Minhyea Lee, D. Reznik, A. Maisuradze, R. Khasanov, E. Morenzoni, Y. J. Uemura, "Restoration of quantum critical behavior by disorder in pressure-tuned $(\text{Mn,Fe})\text{Si}$ ", *Nature Quantum Materials* **2**, 44 (2017).
10. A. C. Bornstein, B. J. Chapman, N. J. Ghimire, D. Mandrus, D. S. Parker and Minhyea Lee, "Out-of-plane spin-orientation dependent magnetotransport properties in the anisotropic helimagnet $\text{Cr}_{1/3}\text{NbS}_2$ ", *Phys. Rev. B* **91**, 184401 (2015).
11. B. J. Chapman, A. C. Bornstein, N. J. Ghimire, D. Mandrus and Minhyea Lee, "Spin structure of the anisotropic helimagnet $\text{Cr}_{1/3}\text{NbS}_2$ in magnetic field", *App. Phys. Lett.* **105**, 072405 (2014).
12. B. J. Chapman, Maxwell J. Grossnickle, Thomas Wolf and Minhyea Lee, "Large enhancement of emergent magnetic fields in MnSi with impurities and pressure", *Phys. Rev. B* **88**, 214406 (2013).

(D) Synergistic Activities

- Journal referee for numerous scientific publications including Physics Review Letters, Nature and Nature publishing company journals and Science, Applied Physics Letters and others.
- Grant reviewer for federal and international funding agencies.
- Organizer for Conference for Undergraduate Women in Physics 2017, Boulder CO.