

# Stanford

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## Young Lee

Professor of Applied Physics and of Photon Science

### Bio

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#### ACADEMIC APPOINTMENTS

- Professor, Applied Physics
- Professor, Photon Science Directorate
- Principal Investigator, Stanford Institute for Materials and Energy Sciences

### Teaching

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#### COURSES

##### 2023-24

- Electricity and Magnetism: PHYSICS 43 (Win)

##### 2022-23

- Electricity and Magnetism: PHYSICS 43 (Win)

##### 2021-22

- Electricity and Magnetism: PHYSICS 43 (Win)

##### 2020-21

- Condensed Matter Seminar: APPPHYS 470 (Aut, Win, Spr)
- Mechanics: PHYSICS 41 (Spr)

#### STANFORD ADVISEES

##### Doctoral Dissertation Reader (AC)

Xue Han, Yuntian Li, Jay Qu, Sijia Zhao, Mark Zic

##### Doctoral Dissertation Advisor (AC)

Aaron Breidenbach

##### Doctoral (Program)

Jenny Hu, Sijia Zhao

### Publications

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#### PUBLICATIONS

- **Fermi surface reconstruction in electron-doped cuprates without antiferromagnetic long-range order.** *Proceedings of the National Academy of Sciences of the United States of America*  
He, J., Rotundu, C. R., Scheurer, M. S., He, Y., Hashimoto, M., Xu, K., Wang, Y., Huang, E. W., Jia, T., Chen, S., Moritz, B., Lu, D., Lee, et al  
2019; 116 (9): 3449–53

- **Enhancement and destruction of spin-Peierls physics in a one-dimensional quantum magnet under pressure** *PHYSICAL REVIEW B*  
Rotundu, C. R., Wen, J., He, W., Choi, Y., Haskel, D., Lee, Y. S.  
2018; 97 (5)
- **Synthesis dependent properties of barlowite and Zn-substituted barlowite** *Journal of Solid State Chemistry*  
Smaha, R. W., He, W., Sheckelton, J. P., Wen, J., Lee, Y. S.  
2018; 268: 123-129
- **Infrared phonons as a probe of spin-liquid states in herbertsmithite ZnCu<sub>3</sub>(OH)(6)Cl<sub>2</sub>** *JOURNAL OF PHYSICS-CONDENSED MATTER*  
Sushkov, A. B., Jenkins, G. S., Han, T., Lee, Y. S., Drew, H. D.  
2017; 29 (9)
- **Correlated impurities and intrinsic spin-liquid physics in the kagome material herbertsmithite** *PHYSICAL REVIEW B*  
Han, T., Norman, M. R., Wen, J., Rodriguez-Rivera, J. A., Helton, J. S., Broholm, C., Lee, Y. S.  
2016; 94 (6)
- **Do quantum spin liquids exist?** *PHYSICS TODAY*  
Imai, T., Lee, Y. S.  
2016; 69 (8): 30-36
- **Evidence for a gapped spin-liquid ground state in a kagome Heisenberg antiferromagnet** *SCIENCE*  
Fu, M., Imai, T., Han, T., Lee, Y. S.  
2015; 350 (6261): 655-658
- **Thermal Hall Effect of Spin Excitations in a Kagome Magnet** *PHYSICAL REVIEW LETTERS*  
Hirschberger, M., Chisnell, R., Lee, Y. S., Ong, N. P.  
2015; 115 (10)