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Bio

BIO

I am a PhD Candidate at Carnegie Mellon University and Visiting Physicist at SLAC National Accelerator Laboratory and the Stanford Institute for Materials and Energy Sciences. My research focuses on using state-of-the-art X-ray facilities such as the Linac Coherent Light Source (LCLS) at SLAC to study ultra-fast dynamics in materials. I am especially interested in how X-ray speckle phenomena can be used to understand the role quantum fluctuations play in the emergence of novel quantum phases in low-dimensional materials.

EDUCATION AND CERTIFICATIONS

- BA, Washington & Jefferson College , Physics (2017)

Publications

PUBLICATIONS

- **Capturing dynamical correlations using implicit neural representations.** *Nature communications*
Chitturi, S. R., Ji, Z., Petsch, A. N., Peng, C., Chen, Z., Plumley, R., Dunne, M., Mardanya, S., Chowdhury, S., Chen, H., Bansil, A., Feiguin, A., Kolesnikov, et al
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- **Testing the data framework for an AI algorithm in preparation for high data rate X-ray facilities**
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- **Speckle correlation as a monitor of X-ray free-electron laser induced crystal lattice deformation.** *Journal of synchrotron radiation*
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2020; 27 (Pt 6): 1470–76
- **Compact hard x-ray split-delay system based on variable-gap channel-cut crystals** *OPTICS LETTERS*
Sun, Y., Wang, N., Song, S., Sun, P., Chollet, M., Sato, T., van Driel, T. B., Nelson, S., Plumley, R., Montana-Lopez, J., Teitelbaum, S. W., Haber, J., Hastings, et al
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