

# Katherine N. Quinn | Publication List

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## Peer-Reviewed Publications

- Current **Katherine N. Quinn**, Colin B. Clement, Francesco De Bernardis, Michael D. Niemack, and James P. Sethna.  
*Visualizing probabilistic models: Intensive Principal Component Analysis.*  
(Under Review with PNAS) <https://arxiv.org/abs/1810.02877>
- 2019 **Katherine N. Quinn**, Heather Wilber, Alex Townsend, and James P. Sethna.  
*Chebyshev approximation and the global geometry of model predictions.*  
Physical Review Letters **122** 158302  
<https://link.aps.org/doi/10.1103/PhysRevLett.122.158302>
- 2019 Cole Walsh, **Katherine N. Quinn**, C. Wieman, and N.G. Holmes.  
*Quantifying critical thinking: Development and validation of the Physics Lab Inventory of Critical thinking (PLIC).*  
Physical Review, PER (Accepted, May 9 2019)  
<https://arxiv.org/abs/1901.06961>
- 2019 **Katherine N. Quinn**, Kathryn L. McGill, Michelle M. Kelley, Emily M. Smith, and N.G. Holmes.  
*Who does what now? How physics lab instruction impacts student behaviors.*  
2018 Physics Education Research Conference Proceedings  
<http://dx.doi.org/10.1119/perc.2018.pr.Quinn>
- 2019 Cole Walsh, **Katherine N. Quinn**, and N. G. Holmes.  
*Assessment of critical thinking in physics labs.*  
2018 Physics Education Research Conference Proceedings  
<http://dx.doi.org/10.1119/perc.2018.pr.Walsh>
- 2018 **Katherine N. Quinn**, Carl E. Wieman, and N.G. Holmes.  
*Interview Validation of the Physics Lab Inventory of Critical thinking (PLIC).*  
2017 Physics Education Research Conference Proceedings pp. 234-237  
<https://doi.org/10.1119/perc.2017.pr.076>
- 2017 James P. Sethna, Matthew K. Bierbaum, Karin A. Dahmen, Carl P. Goodrich, Julia R. Greer, Lorien X. Hayden, Jaron P. Kent-Dobias, Edward D. Lee, Danilo B. Liarte, Xiaoyue Ni, **Katherine N. Quinn**, Archishman Raju, D. Zeb Rocklin, Ashivni Shekhawat, and Stefano Zapperi.  
*Deformation of Crystals: Connections with Statistical Physics.*  
Annual Review of Materials Research **47** pp. 217-246  
<https://doi.org/10.1146/annurev-matsci-070115-032036>

- 2013 **Katherine Quinn**, D.H. Ryan, P.C. Canfield, S.L. Bud'ko, and J.M. Cadogan.  
*A search for field-induced ordering in the optimally doped Ba(Fe,Co)2As2 superconductor.*  
Journal of Applied Physics **113** 17E127  
<https://doi.org/10.1063/1.4795421>

## Publications in Preparation

- Current **Katherine N. Quinn**, Mark K Transtrum, Ben Machta, and James Sethna.  
*Multiparameter models in physics.*  
(Invited by *Reports on Progress in Physics*)