

Adam Lamson

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EDUCATION **University of Colorado Boulder**
Ph.D. Candidate, Physics (expected May 2020)
Dissertation Topic: Theory of crosslinker mediated self-assembly of filamentous networks
Advisor: Dr. Meredith Betterton
M.S. in Physics, May 2017

Rensselaer Polytechnic Institute
B.S. in Physics, Magna cum laude, August 2014

RESEARCH INTERESTS Computational modeling of active matter. Stochastic simulations of crosslinked filamentous networks. Effective field theories of molecular motor forces and torques.

SCIENTIFIC RESEARCH EXPERIENCE 2014–2019 Computational modeling of crosslinked active matter
Advisor: Meredith Betterton, Department of Physics, University of Colorado, Boulder CO
2013 Measuring characteristics of Hamamatsu Multi Pixel Photon Counter for electromagnetic calorimeters
Advisor: Huan Z. Huang, Department of Physics, University of California, Los Angeles CA
2011–2013 Reconstruction of muon trajectories through the Daya Bay experimental halls
Advisor: Jim Napolitano, Department of Physics, Rensselaer Polytechnic Institute, Troy NY

PUBLICATIONS **Lamson A**, Edelmaier C, Glaser M et al. Theory of cytoskeletal reorganization during crosslinker-mediated mitotic spindle assembly, resubmitted to *Biophys. J.* Feb 2019; biorxiv doi:10.1101/419135.
Rincon S, **Lamson A**, Blackwell R et al. Kinesin-5-independent mitotic spindle assembly requires the antiparallel microtubule crosslinker Ase1 in fission yeast. *Nat Commun.* 2017;8:15286. doi:10.1038/ncomms15286
Blackwell R, ..., **Lamson A**, ..., Betterton M. Physical determinants of bipolar mitotic spindle assembly and stability in fission yeast. *Sci Adv.* 2017;3(1):e1601603. doi:10.1126/sciadv.1601603

CONFERENCE PRESENTATIONS

	2019	March	<i>Theory of cytoskeletal rearrangement and force generation</i> APS March Meeting, Boston
		January	<i>Theory of cytoskeletal reorganization during crosslinker-mediated mitotic spindle assembly</i> Rocky Mountain Yeast Meeting, Colorado State University
	2018	March	<i>Model of mitotic spindle self-assembly without motor proteins</i> APS March Meeting, Los Angeles
OUTREACH	2016		CU Prime Mentor for Undergraduates CU Boulder Relay for Life Survivorship and Education Chair
	2013		RPI Society of Physics Students Build Team Captain Philanthropy Chair for Phi Mu Delta Nu Theta chapter
TEACHING EXPERIENCE	2018	Spring	Lecturer and teaching assistant, Science and public policy
	2017	Fall	Teaching Assistant, Physics II
	2016	Summer	Teaching Assistant, Physics I
	2015	Spring	Teaching Assistant, Physics II, Classical Mechanics with Math Methods
	2014	Fall	Teaching Assistant, Physics I
HONORS AND AWARDS	2015–2016		NIH/CU Molecular Biophysics Training Scholarship
	2013		ΣΠΣ Physics Honor Society Member, Rensselaer Polytechnic Institute
EXTERNAL PROFESSIONAL TRAINING	2018	January	UCSF-QCB Cell Modeling Hackathon, San Francisco, CA
	2017	July	Cargese Summer School on Theoretical Biophysics, Corsica, France
	2015	July	Condensed matter summer school, Boulder, CO
GRADUATE COURSEWORK			<input type="checkbox"/> Electromagnetic Theory I & II <input type="checkbox"/> Biophysics of Cells & Tissues <input type="checkbox"/> Intro to Quantum Mechanics I, II & III <input type="checkbox"/> Biophysical Methods <input type="checkbox"/> Statistical Mechanics <input type="checkbox"/> Biochemistry Seminar <input type="checkbox"/> Intermediate Math Methods <input type="checkbox"/> Topics in Scientific Writing
PROFESSIONAL COMPETENCIES			Computer languages: C++/C, Python, Matlab, Mathematica, Unix