Stanford

Adrienne Propp

Ph.D. Student in Computational and Mathematical Engineering, admitted Autumn 2021

Bio

BIO

I am a second year PhD student in ICME (the Institute for Computational and Mathematical Engineering). Prior to Stanford, I was working as a technical analyst at the RAND Corporation where I spent most of my time designing microsimulations and other models to investigate topics in healthcare, education, disaster relief, and international relations.

My research interests fall broadly into the intersection of data and modeling. Past research projects have ranged from computational models of the heart to inverse modeling to predict satellite performance. At Stanford, I am exploring topics including uncertainty quantification, adaptive sampling, graph-informed neural networks, and geophysical modeling.

EDUCATION AND CERTIFICATIONS

- M.Sc., University of Oxford , Mathematical Modelling and Scientific Computing (2018)
- B.A., Harvard University , Applied Mathematics (2017)

Publications

PUBLICATIONS

- **An orthotropic electro-viscoelastic model for the heart with stress-assisted diffusion** *BIOMECHANICS AND MODELING IN MECHANOBIOLOGY*
  Propp, A., Gizzi, A., Levrero-Florencio, F., Ruiz-Baier, R.
  2020; 19 (2): 633-659
- **High-intensity laser-accelerated ion beam produced from cryogenic micro-jet target** *REVIEW OF SCIENTIFIC INSTRUMENTS*
  Gauthier, M., Kim, J. B., Curry, C. B., Aurand, B., Gamboa, E. J., Gode, S., Goyon, C., Hazi, A., Kerr, S., Pak, A., PROPP, A., Ramakrishna, B., Ruby, et al
  2016; 87 (11)
- **Absolute dosimetric characterization of Gafchromic EBT3 and HDv2 films using commercial flat-bed scanners and evaluation of the scanner response function variability.** *Review of scientific instruments*
  Chen, S. N., Gauthier, M., Bazalova-Carter, M., Bolanos, S., Glenzer, S., Riquier, R., Revet, G., Antici, P., Morabito, A., PROPP, A., Starodubtsev, M., Fuchs, J.
  2016; 87 (7): 073301-?