

Calina A. Copos

Contact Information

Courant Institute
New York University
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Research Interests

Mathematical biology, cellular mechanics, fluid-structure interaction, computational fluid dynamics, applied mathematics

Education

- Ph.D., Applied Mathematics 2017
University of California Davis (Davis, CA)
- M.S., Applied Mathematics 2013
University of California Davis (Davis, CA)
- B.S., Mathematics, Physics 2010
University of Richmond (Richmond, VA)

Journal Publications

- C.A. Copos, R.D. Guy, *A porous viscoelastic model for the cell cytoskeleton*. ANZIAM Journal, (in review), 2018.
- C.A. Copos, S. Walcott, J.C. del Alamo, E. Bastounis, A. Mogilner, R.D. Guy, *Mechanosensitive adhesion explain stepping motility in amoeboid cells*. Biophysical Journal, 112, 2672-2682, 2017.
- W. Strychalski, C.A. Copos, O.L. Lewis, R.D. Guy, *A poroelastic immersed boundary method with applications to cell biology*. Journal of Computational Physics, 282, 77-97, 2015.
- C. Bodea, C.A. Copos, M.F. Der, D. O'Neal, J.A. Davis, *Shared Autocorrelation Property of Sequences*. IEEE: Transactions on Information Theory, 57(6):3805-809, 2011.

Selected Presentations

Invited Talks

- Courant Institute Biomathematics/Computational Biology Colloquium (October 2017)
- Harvard Widely Applied Math Colloquium (January 2017)
- SIAM Conference on the Life Sciences (July 2016)
- UC Davis Mathematical Biology Seminar (May 2016)

Others

- University of Utah Conference on Modeling Complex Fluids and Gels for Biological Applications (May 2017) *Poster*
- Annual Meeting of the Biophysical Society (February 2017) *Poster*
- Annual Meeting of the American Society of Cell Biology meeting (December 2015) *poster*
- SIAM Conference on the Computational Science and Engineering meeting (January 2015) *Poster*
Selected for Best Poster Award
- SIAM Conference on the Life Sciences (July 2014) *Poster*

- Annual Meeting of the GPU Technology Conference (February 2013) *Poster*
- SIAM Conference on the Computational Science and Engineering meeting (February 2013) *Poster*

Honors and Awards

NSF Graduate Student Fellowship	2011 – 2014
NSF Graduate Research Opportunities Worldwide (France)	2014
Jackson J. Taylor Best Senior Seminar in Physics, University of Richmond	2010
Science Scholarship, University of Richmond	2006 – 2010

Teaching Experience

Instructor:

- Calculus III Spring 2018
- Mathematics for Economists II Fall 2017
- Calculus I for Biologists Spring 2017
- Calculus III for Biologists Summer 2016, 2015

Assistant:

- European Molecular Biology Laboratory Workshop October 2016
- Calculus II for Biologists Fall 2017
- Calculus III for Biologists Spring 2016
- Calculus I for Biologists, *Honors* Fall 2016

High School Teacher:

- Pre-Calculus, Mathematical Modeling with Pre-Calculus, Introduction to Physics 2011-2010

Service

Reviewer for Biomechanics and Modeling in Mechanobiology
 Reviewer for PLOS ONE
 The California State Summer School for Mathematics and Science Assistant, 2013–2016
 UC Davis Galois Group President, 2015-2016

Professional Membership

American Women in Mathematics
 Biophysical Society
 Society for Industrial and Applied Mathematics