

Pragya Srivastava

247-Physics Building
Syracuse University, NY 13244

PERSONAL INFORMATION

- Date of Birth : July 8, 1986
- Nationality : Indian

PRESENT POSITION

Post Doctoral Researcher,
July 2013 - Present
Physics Department, Syracuse University
Syracuse NY-13244.

CONTACT

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RESEARCH INTERESTS

- Physics of Biological Systems
- Soft Condensed Matter
- Non-equilibrium Statistical Mechanics
- Rheology of active matter

EDUCATION

- PhD in Physics, Raman Research Institute
July 2007-July 2013, Bangalore, India-560080
Thesis title : Active Mechanics of Cortical Actin : Geometry and Shape Deformation
PhD Advisor : Prof. Madan Rao
- Jawaharlal Nehru University, New Delhi, India
Master of Science(Physics) : July 2005-July 2007
- University of Allahabad, Allahabad, India
Bachelor of Science : July 2002-May 2005,
Main Subjects : Physics, Mathematics
Other Subject : Chemistry

COMPUTATIONAL SKILLS

Fortran, Matlab, Mathematica, ImageJ, Image Analysis.

AWARDS

- Awarded Nature Travel Grant to attend Gordon Research Conference and Seminar on Soft Condensed Matter Physics, August 17-23, 2013.
- Qualified for Junior Research Fellowship by Council for Scientific and Industrial Research in December 2007.
- Recipient of University Grants Commission Scholarship for university rank holders from July 2005- July 2007.
- Felicitated by Ministry of Education Uttarakhand, India in 2002 for securing first rank in Uttarakhand state in 10+2.

TEACHING EXPERIENCE

- Teaching assistant for advanced course,
Polymers and Membranes : Physical Principles and Biological Applications, January, 2011.
Principal Instructors : Prof. Madan Rao and Prof. Srikanth Sastry
National Centre for Biological Sciences, Bangalore and
Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore.

TALKS AND POSTERS

1. APS Meeting, March 3-7, 2014, Denver, Colorado
Talk Titled : *Axi-symmetric patterns of active polar filaments on spherical and composite surfaces*
2. Condensed Matter and BioPhysics Seminar, September 13, 2013
Physics Department, Syracuse University, Syracuse, NY-13244.
Talk Titled : *Active Mechanics of Cortical Actin : Geometry and Shape Deformation*
3. Gordon Research Conference and Seminar on Soft Condensed Matter Physics, August 17-23, 2013
Colby Sawyer College, New London, NH.
Poster titled : *Instabilities and waves in the leading edge of moving and spreading cells.*
4. Visit to Institute of Mathematical Sciences, March 27, 2013-March 30, 2013, Chennai, India.
Talk titled : *Patterns of active polar filaments on curved membrane surfaces and active deformation of the cell membrane*
5. ICAM : Emergent order in Biology, July 23, 2012- August 4, 2012, IESC, France.
Talk titled : *Patterns of active polar filaments on cylindrical and spherical cells.*
6. Visit to Prof. Gerhard Gompper's group, August 4, 2012-August 8, 2012, Forschungszentrum, Julich, Germany.
Talk titled : *'Patterns of active polar filaments on cylindrical and spherical cells'*.
7. 'Unifying Concepts in Materials: JA Krumhansl School & Symposium', January 30, 2012 - February 08, 2012.
Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore &
National Centre for Biological Sciences, Bangalore.
Poster titled : *Patterns of active polar filaments on curved geometries.*

CONFERENCES ATTENDED

1. American Physical Society Meeting March 3-7, 2014
Denver, Colorado.
2. Gordon Research Conference and Seminar on Soft Condensed Matter Physics, August-2013, Colby Sawyer College, New London, NH.
3. ICAM : Emergent order in Biology, July-2012, IESC, France.
4. 'Unifying Concepts in Materials: JA Krumhansl School & Symposium', January-2012
Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore &
National Centre for Biological Sciences, Bangalore.
5. Advanced School on Living Mechanics - Cells, Tissues and Organisms, November-2010, National Center for biological Sciences, Bangalore, India.
6. Conference and School on Nucleation Aggregation and Growth, July-2010, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India.
7. ICTS Program on Non-Equilibrium Statistical Physics, January-2010, Indian Institute of Technology, Kanpur, India.

PUBLICATIONS

1. Ananyo Maitra, Pragya Srivastava, Madan Rao and Sriram Ramaswamy, 'Activating Membranes', Phys. Rev. Lett. **112**, 258101(2014).
2. Pragya Srivastava, Roie Shlomovitz, Nir Gov and Madan Rao, 'Patterning of polar active filaments on a tense cylindrical membrane', Phys. Rev. Lett. **110**, 168104(2013).
3. Mithilesh Mishra, Yinyi Huang, Pragya Srivastava, Ramanujam Srinivasan, Mayalagu Sevugan, Roie Shlomovitz, Nir Gov, Madan Rao, and Mohan Balasubramanian, 'Cylindrical Cellular Geometry Ensures Fidelity of Division Site Placement in Fission Yeast', Journal of Cell Science, **125**, 3850(2012).
4. R.C. Sarasij, Pragya Srivastava and Madan Rao, 'Textured domains on tense surfaces and membranes: Effect of tilt and chirality', Phys. Rev. E **85**, 041920 (2012).

REFERENCES

- Prof. M. Cristina Marchetti
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- Prof. Sriram Ramaswamy
TIFR centre for Interdisciplinary Sciences 21 Brundavan Colony, Narsingi, Hyderabad
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- Prof. Satyajit Mayor
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