# Preeti Sahu Curriculum Vitae

Physics Building, Room 249 Department of Physics Syracuse University Syracuse, NY 13210, USA

 $+1\ 315\ 372\ 2099$ prsahu@syr.edu  $\bowtie$ sahup92.wixsite.com/preeti-sahu 9<sup>th</sup> June 1992 DOB

#### EDUCATION

• Syracuse University, Syracuse, NY, USA Ph.D. Physics

Current, From-Aug 2015 3.33/4.0

• NISER, Bhubaneshwar, Odisha, India 5-YEARS INTEGRATED BSc.-MSc. PHYSICS

Aug 2010-June 2015 8.3/10

#### Projects Undertaken

Rheological Response of Active Glasses

Aug 2014-May 2015

Guide: Dr. A.V. Anil Kumar, NISER, Bhubaneshwar Study Kinesin Conformational Change in apo-state

**SUMMER 2014** 

Guide: Dr. Jared C Cochran, IU, Bloomington

Diffusion in 1D and 2D

**SUMMER 2013** 

Guide: Prof. Abhishek Dhar, ICTS, Bangalore

Interpolating solution in a mechanical model under quench

SUMMER 2012

Guide: Dr. Sudipta Mukherji, Institute of Physics, Bhubaneshwar

A Study of Genetic Factors for RPL

**SUMMER 2011** 

Guide: Dr. Debasmita P. Alone, NISER, Bhubaneshwar

### Science Workshops

Mechanics in Morphogenesis workshop

Feb 2018

PCTS, Princeton University

Summer School- Soft Solids and Complex fluids

Feb 2018

UMass, Amherst

Monsoon School- Physics of Life

Jun 2013

NCBS-ICTS, Bangalore

**National Science Camp** 

2011

IISER Pune & IISc Bangalore

### **PUBLICATION**

- 1. 'Interpolating solution in a mechanical model under quench'- by Preeti Sahu. PRAYAS Student Journal of Physics. Vol 4 Number 6,(Jan- Mar. 2013) published by IATP [Link]
- 2. 'Large-scale mixing and small-scale demixing in binary vertex model fluids'- by Preeti Sahu, Daniel M. Sussman, M. Cristina Marchetti, M. Lisa Manning, and J. M. Schwarz in preparation.
- 3. 'Modeling the Solid-Fluid Transition of Ordered Biological Tissues'- by Preeti Sahu\*, Janice Kang\*, Gonca Erdemci-Tandogan and M. Lisa Manning in preparation.

#### INVITED TALK

# TEACHING EXPERIENCE

AST 101: Our Corner of the Universe

Fall 2015

Teaching Assistant for Prof. Cristian Armendariz-Picon

PHY 221: General Physics Laboratory I

Spring & Fall 2016

Teaching Assistant for Prof. Walter Freeman

Mentoring REU student: Allie Brown

**SUMMER 2016** 

Grad Mentor for Prof. Lisa Manning

#### Contributed posters and presentations

Poster- Understanding how cells group together in confluent biological tissues

Feb 2017

Stevenson Biomaterials Research Poster Competition, Syracuse

Poster- The search for physical mechanism of cell sorting in bidisperse confluent tissue

Feb 2018

Mechanics in Morphogenesis Poster Competetion, PCTS

Talk- Mechanical difference insufficient to create sorting in confluent mixtures

**March** 2018

APS March Meeting

Talk- Role of Morphological Differences in Cell Sorting

**DEC 2018** 

ICSM Jaipur

# ACHIEVEMENTS

- 2018 received SLM travel grant \$1000.
- 2014 Awarded Khorana fellowship to do a 10 weeks summer internship in Indiana University.
- 2014 Selected in HRI's VSP and ICTS's S N Bhatt Memorial Excellence Fellowship Program.
- 2013 Awarded Summer Research Fellowship by Indian Academy of Sciences to work in ICTS.
- 2013 Runners-up team in a national-level science quiz competition called MIMAMSA 2013.
- 2012 Batch Topper in Physics Dept. of Physics with SGPA- 9.4/10.
- 2011 Awarded a generous fellowship by Govt. of India under KVPY (4 years)
- 2010 Awarded Govt. sponsored INSPIRE fellowship for 1-year after qualifying NEST examination

### Computer Skills

Advanced Knowledge

ĿT<sub>F</sub>X, MATLAB

Intermediate Knowledge

Bash Scripting

C++, Linux, Excel

Microsoft Windows

Матнематіса

### Extra-Curricular Activities

- 1. UGCS Student Representative & Physics Student Seminar Convener at NISER
- 2. Hindustani Classical Vocalist & Graduate president of SPICMACAY Syracuse
- 3. Active member in organizing 2016 APS Conference for UG Women in Physics

#### References

Lisa Manning - Ph.D. advisor

Syracuse University Dept. of Physics

Physics Building, Syracuse,

NY 13244, USA mmanning@syr.edu

(s): 315.443.3920)

Cristina Marchetti - Ph.D. advisor

Syracuse University Dept. of Physics

Physics Building, Syracuse,

NY 13244, USA mcm@phy.syr.edu

(s): 315.443.2581)

J. M. Schwarz - Ph.D. advisor

Syracuse University Dept. of Physics

Physics Building, Syracuse,

NY 13244, USA

jschwarz@physics.syr.edu

(s): 315.443.3887