Mahesh C. Gandikota

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Present Employment Postdoc in the Cacciuto Group,

Department of Chemistry, Columbia University, New York, NY, USA.

EDUCATION

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

2021

Thesis Advisor: Prof. J. M. Schwarz

G.P.A.: 3.7/4.0

Integrated M.Sc., Physics, National Institute of Science Education

and Research, Orissa, India

2015

 ${\it Thesis Advisor: Prof. Somendra Bhattacharjee},$

Ashoka University, Haryana, India

G.P.A.: 8.2/10.0

Twelfth grade board exam, National College, Bangalore, India

2010

Marks: 81%

Tenth grade board exam, HJKP, Bangalore, India

2008

Marks: 97.4%

EMPLOYMENT

Postdoc, Department of Chemistry, Columbia University, NY, USA

2021-Present

Research Assistant, Department of Physics, Syracuse University, NY, USA

2016 - 2021

Teaching Assistant, Department of Physics, Syracuse University, NY, USA

2015-2020

PUBLICATIONS

Under Review:

The crumpling transition of active tethered membranes with A. Cacciuto.

Published:

- 6. M. C. Gandikota and A. Cacciuto, "Rectification of confined soft vesicles containing active particles", Soft Matter, 19.2 (2023).
- 5. M. C. Gandikota and A. Cacciuto, "Effective forces between active polymers", Physical Review E, 105, 034503 (2022).
- 4. <u>M. C. Gandikota</u> Amanda Parker and J. M. Schwarz, "Rigidity transitions in zero-temperature polygons", Physical Review E, 106, 055003 (2022).
- 3. M. C. Gandikota and J. M. Schwarz, "Buckling without bending morphogenesis: Nonlinearities, spatial confinement, and branching hierarchies", New Journal of Physics, 23, 063060 (2021).
- 2. M. C. Gandikota, Katarzyna Pogoda, Anne van Oosten, T. A. Engstrom, A. E. Patteson, P. A. Janmey, J. M. Schwarz, "Loops versus lines and the compression stiffening of cells", Soft Matter, 16(18), 4389-4406 (2020).
- 1. S. Paul, M. C. Gandikota, "Fourier Transform of Electric Signal using Kundt's Tube", Student Journal of Physics, 6(2), 95-100 (2016).

TEACHING EXPERIENCE

Recitations/Substitute Lecturer

PHY 216, General Physics II for honors and majors Spring & Fall 2017, Spring 2018
PHY 212, General Physics II Spring & Fall 2016
PHY 211, General Physics I Fall 2015

Labs

AST 101, Our Place in the Universe Fall 2020
PHY 102, Major Concepts of Physics II Spring 2019, 2020

 ${\bf Grading/Substitute\ Lecturer}$

PHY 635, Physical Cell Biology
PHY 360, Vibrations, Waves and Optics
Fall 2018

MENTORING Undergraduate Students

Alexandra Brown (REU program) Summer 2016

LANGUAGES Human: English (fluent), Hindi, Telugu (mother tongue), Kannada (native).

Computer: Bash, C++, Python, MATHEMATICA.

Markup: LATEX, Markdown, HTML, CSS.

Operating System: Linux, Windows.

AWARDS

Summer Graduate Fellowship, Soft Matter Program, Syracuse University

Summer 2017

Henry Levinstein Fellowship, Physics Department, Syracuse University

Summer 2016

All India Rank 24, Graduate Aptitude Test in Engineering (GATE) 2015

Summer Research fellow, Indian Academies of Sciences

Summer 2012

INSPIRE fellowship, Department of Science and Technology, Government of India 2010-15

Conferences/ Workshops Northeast Complex Fluids and Soft Matter workshop, contributed talk. 2023

APS March Meeting, contributed talks. 2017, 2018, 2019, 2020

Soft Matter Summer School, University of Massachusetts, Amherst, poster. 2017

PROFESSIONAL ACTIVITIES AND SERVICE

Experiment Leader, Girls Science Day, Columbia University. 2023

Organizer, Soft Matter Journal Club, Syracuse University. 2019-2020

Moderator, APS Conference for Undergraduate Women in Physics, Syracuse University. 2016

Volunteer, Photographer, Active and Smart Matter conference, Syracuse University. 2016

Volunteer, Science Day, annual joint outreach program to high school students, NISER, IOP, Bhubaneswar. 2011, 2012, 2014

NON-ACADEMIC ACTIVITIES **President**, Argentine Tango Club, Syracuse University.

Fall 2017 - Fall 2020

Editorial Board, Jignasa, annual magazine of NISER, Bhubaneswar.

2014

References

A. Cacciuto

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J. M. Schwarz

Associate Professor Department of Physics Syracuse University 229A Physics Building Syracuse, NY 13244, USA email: jmschw02@syr.edu

Cristina Marchetti

Professor

Department of Physics

University of California, Santa Barbara

Broida 6235

Santa Barbara, CA 93106, USA email: cmarchetti@ucsb.edu

Somendra M. Bhattacharjee

Professor

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