

Mahesh C. Gandikota

CONTACT INFORMATION

H108, Academic Block, ICTS
Shivakote, Hesaraghatta Hobli
Bengaluru - 560089.

mahesh.gandikota@icts.res.in
[mcgandikota.github.io](https://github.com/mcgandikota)

EDUCATION

Ph.D., Physics, Syracuse University, Syracuse, NY, USA **2021**
Thesis Advisor: Prof. J. M. Schwarz

Integrated M.Sc., Physics, National Institute of Science Education
and Research, Orissa, India **2015**
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, International Centre for Theoretical Sciences, Karnataka, India **2024–Present**
Postdoc, Department of Chemistry, Columbia University, NY, USA **2021–2024**
Research Assistant, Department of Physics, Syracuse University, NY, USA **2016–2021**
Teaching Assistant, Department of Physics, Syracuse University, NY, USA **2015–2020**

PUBLICATIONS

8. [M. C. Gandikota](#), Shibabanda Das and A. Cacciuto, “[Spontaneous crumpling of active spherical shells](#)”, Soft Matter, 20.17 (2024).
7. [M. C. Gandikota](#) and A. Cacciuto, “[The crumpling transition of active tethered membranes](#)”, Soft Matter, 19.28 (2023).
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. [M. C. Gandikota](#) 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**

Grading/Substitute Lecturer

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

Guest Lecturer

CHEM G4221, Statistical Thermodynamics **Fall 2022**

MENTORING

Undergraduate Students

Alexandra Brown (REU program) **Summer 2016**

LANGUAGES

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

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

Markup: \LaTeX , Markdown.

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

Gordon Research Seminar & Conference, contributed posters. **2023**

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. **April, Nov 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
Associate Professor
Department of Chemistry
Columbia University in the City of New York
Havemeyer Hall
3000 Broadway, New York, NY 10027, USA
email: ac2822@columbia.edu

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