

## Maresh C. Gandikota

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CONTACT INFORMATION	Physics Building, Sims Drive Syracuse University Syracuse, NY - 13210 USA	<a href="mailto:mcgandikota@gmail.com">mcgandikota@gmail.com</a> <a href="https://mcgandikota.github.io">mcgandikota.github.io</a>
EDUCATION	<b>Ph.D., Physics</b> , Syracuse University, Syracuse, NY, USA Dissertation Advisor: Prof. J. M. Schwarz G.P.A.: 3.7/4.0  <b>Integrated M.Sc., Physics</b> , NISER, Orissa, India National Institute of Science Education and Research Thesis Advisor: Prof. Somendra Bhattacharjee, Ashoka University, Bihar, India G.P.A.: 8.2/10.0  <b>Twelfth grade board exam</b> , National College, Bangalore, India Marks: 81%  <b>Tenth grade board exam</b> , HJKP, Bangalore, India Marks: 97.4%	<b>2015 - Present</b>  <b>2015</b>  <b>2010</b>  <b>2008</b>
EMPLOYMENT	<b>Research Assistant</b> , Department of Physics, Syracuse University, USA  <b>Teaching Assistant</b> , Department of Physics, Syracuse University, USA	<b>August 2016–Present</b>  <b>August 2015–Present</b>
PUBLICATIONS	<u>Under review:</u> 4. <b>M. C. Gandikota</b> and J. M. Schwarz, “ <a href="#">Buckling without bending morphogenesis: Nonlinearities, spatial confinement, and branching hierarchies</a> ”. 3. T. Wöllert, E. Wait, <b>M. C. Gandikota</b> , J. M. Schwarz, G. G. Holz, T. Chew, G. M. Langford, “Motility of microvilli on pancreatic beta cells is Arp2/3-dependent and may represent a dynamic nutrient search strategy”. <u>Published:</u> 2. <b>M. C. Gandikota</b> , Katarzyna Pogoda, Anne van Oosten, T. A. Engstrom, A . E. Patteson, P. A. Janmey, J. M. Schwarz, “ <a href="#">Loops versus lines and the compression stiffening of cells</a> ”, Soft Matter, 16(18), 4389-4406, (2020). 1. S. Paul, <b>M. C. Gandikota</b> , “ <a href="#">Fourier Transform of Electric Signal using Kundt’s Tube</a> ”, Student Journal of Physics, 6(2), 95-100, (2016).	
ONGOING PROJECTS	1. “Convexity induced rigidity transitions in spring networks” with Amanda Parker and J. M. Schwarz. 2. Constructing a null model for mouse neural network using principles of statistical mechanics” with Ahmad Borzou and J. M. Schwarz.	

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**

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:** L<sup>A</sup>T<sub>E</sub>X, 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

**APS March Meeting**, oral presentations.      **2017, 2018, 2019, 2020**

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

**Mansoon School: Physics of Life**, National Centre for Biological Sciences, Bangalore.      **2013**

**Summer School in Experimental Physics**, NIUS - HBCSE, TIFR.      **2012**

PROFESSIONAL  
ACTIVITIES AND  
SERVICE

**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

**J. M. Schwarz**

Associate Professor, Physics department  
Syracuse University  
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Syracuse, NY 13244  
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**Alison Patteson**

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