

CHURNI GUPTA

Ph.D. Candidate ◊ Department of Mathematics ◊ University of Florida
churnibidisha@ufl.edu

EDUCATION

- Ph.D. in Mathematics(Expected)** 2019 - 2021
University of Florida
Adviser: Dr. Maia Martcheva
Thesis: Effect of Network on Immuno-epidemiological HIV Model Dynamics in Singular or Coinfection Scenario.
- M.S. in Mathematics** 2016-2019
University of Florida, Gainesville, Fl.
- M.Sc. in Mathematics** 2013-2015
Indian Institute of Technology, Bhubaneswar, India.
- B.Sc. in Mathematics,** 2010-2013
Presidency University, Kolkata, India.

WORK COMPLETED

1. Master's Thesis in IIT Bhubaneswar 2014-2015
Supervisor: Dr. Sasmita Barik
Topic: Characterizing Hadamard Diagonalizable Graphs: Characterized all disconnected and certain connected Hadamard diagonalizable graphs of order 16.

PUBLICATIONS

1. C.Gupta, N.Tuncer, M.Martcheva, A Network Immuno-epidemiological HIV Model [Submitted]
2. C.Gupta, N.Tuncer, M.Martcheva, A Network Immuno-epidemiological Model of HIV and Opioid Epidemics [In Preparation]

FELLOWSHIPS, AWARDS, OR HONORS

1. 2020-2021 Christopher M. Squitieri Scholarship for Graduate Students, University of Florida

DEPARTMENTAL TALKS (UNIVERSITY OF FLORIDA)

Combinatorics Seminar,

1. "On Hadamard diagonalizable Graphs." April 2018.
2. "Combinatorics on words" September 2018.

Biomath Seminar,

1. "Backward Bifurcation and Stability Analysis of a network based SIS epidemic model." November 2019.
2. "A Network Immuno-epidemiological HIV Model" April 2020.

JOURNAL REFEREE

1. Journal of Biological Dynamics

TEACHING EXPERIENCE

University of Florida: TA (Fall 2016-Fall 2020)

1. Calculus I;(Taught as TA for three semesters)
2. Calculus II;(Taught as a TA for three semesters)
3. Survey of Calculus; (Taught as a TA for one semester)
4. Linear Algebra; (Taught as a TA for one semester)
5. Computational Linear Algebra;(Taught as a TA in a hybrid course for one semester)

University of Florida: Instructor of Record

1. Calculus I;(Taught in person for summer 2018)
2. Precalculus;(Taught a stand-alone online course as an instructor for Summer 2020 for UF PROMISE Scholars)
3. Trigonometry;(Taught two sections of a stand-alone online course as an instructor for Fall 2020)

SELECTED SERVICE ITEMS

1. To the department/university
 - (a) Served as the Secretary of Graduate Math Association,UF for year 2018;
 - (b) Served as the President of Graduate Math Association,UF for Spring 2019,Summer 2019.
 - (c) Served as the Vice president of AWM Uf chapter Fall 2019-present.
2. Mentoring Graduate students:
 - (a) Lindsey Grigsby (2017-2020)
 - (b) Puja Pandey (2018-Present)
 - (c) Adam Gregory and Elijah DeJonge (2019-Present)
 - (d) Jason Flynn (2020-Present)

WORKSHOP AND CONFERENCES ATTENDED

1. Mathematics Talent and Training Search , May 2011, Bishwabharati University, Shantiniketan, India
2. 48th South Eastern International Conference on Combinatorics, Florida Atlantic University, March 2017
3. Permutation Patterns, Dartmouth College, July 2018
4. Fall Southeastern Sectional Meeting, AMS, University of Florida, November 2019

SKILLS

1. **Languages:**

English/Hindi/Bengali: Native level fluency.
2. **Software/Programming Languages**

LaTex, MATLAB, Excel.

MEMBERSHIP

American Mathematical Society, Association for Women in Mathematics.

REFERENCES

1. Dr. Maia Martcheva, Professor,
Department of Mathematics
University of Florida, FL, email: maia@ufl.edu
2. Dr. Libin Rong, Associate Professor,
Department of Mathematics
University of Florida, FL, email: libinrong@ufl.edu
3. Dr. Necibe Tuncer, Associate Professor,
Department of Mathematics
Florida Atlantic University, FL, email: ntuncer@fau.edu
4. Ms. Kwai-Lee Chui, Lecturer
Department of Mathematics
University of Florida, FL, email: chui@ufl.edu
(teaching reference)
5. Dr. Willard S. Keeran, Department of Mathematics
University of Florida, FL, email: keeran@ufl.edu
(teaching reference)