

AVI MUKHOPADHYAY

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EDUCATION	Department of Mathematics, University of Florida <i>Ph.D. in Mathematics</i>	Gainesville, USA 2021 - Present
	<ul style="list-style-type: none">• Advisor: Dr. Frank Garvan• Research area: Number Theory and Modular forms	
	Department of Mathematics, Indian Institute of Technology(IIT) <i>M.Sc In Mathematics</i>	Gandhinagar 2019 - 2021
	<ul style="list-style-type: none">• Advisor: Dr. Akshaa Vatwani• Thesis Title: Least Prime in an Arithmetic Progression, Elliptic Curves and Modular Forms	
	Department of Mathematics, Presidency University <i>B.sc in Mathematics</i>	Kolkata, India 2015 - 2018

PUBLICATIONS	1. (with F. Garvan) Some new identities for the Andrews' <i>spt</i> function , in preparation
	2. (with A. Dhar, R. Gupta and R. Sarma) TBA , in preparation
	3. (with F. Garvan) <i>Transformation of third order mock theta functions and new q-series identities</i> , in preparation
	4. (with A. Dhar and R. Sarma) <i>On new minimal excludants of overpartitions related to some q-series of Ramanujan</i> , accepted in the Bulletin of Australian Mathematical Society
	5. (with A. Dhar) <i>A bijective proof of an identity of Berkovich and Uncu</i> , accepted in Séminaire Lotharingien de Combinatoire
	6. (with A. Dhar and R. Sarma) <i>Generalization of the Extended Minimal Excludant of Andrews and Newman</i> , J. Integer Sequences, 26, 2023, Article 23.3.7

EMPLOYMENT	Graduate Teaching Assistant <i>Department of Mathematics, University of Florida Gainesville, FL, USA</i>	2021 - Present
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AWARDS AND HONORS	UF College of Liberal Arts and Sciences (CLAS) Graduate Travel Award <i>To attend and speak at SASTRA-Ramanujan Award ceremony and International Conference on Number Theory</i>	2024
	Chat Yin Ho Scholarship <i>Outstanding graduate student of the year, Department of Mathematics, University Of Florida</i>	2024
	Third Prize in Math Slam Competition, <i>Department of Mathematics, University Of Florida</i>	2024
	Teaching Assistantship <i>Department of Mathematics, University Of Florida</i>	2021-Present

TEACHING EXPERIENCE

Instructor of **Survey of Calculus II (MAC2234)**, Fall 2024

Instructor for **Trigonometry (MAC1114)**, Summer 2024

Re-organizing and creating new content for **Basic College Algebra (MAC1147)**, Spring 2024

TA for **Analytic Geometry and Calculus III (MAC2313)**, Fall 2023

TA for **Precalculus Algebra and Trigonometry(MAC1147)**, Summer 2023

TA for **Analytic Geometry and Calculus II (MAC2312)**, Spring 2023

TA for **Analytic Geometry and Calculus I (MAC2311)**, Fall 2022

TA for **Computational Linear Algebra (MAS3114)**, Summer 2022

TA for **Analytic Geometry and Calculus I (MAC2311)**, Spring 2022

TA for **Analytic Geometry and Calculus I (MAC2311)**, Fall 2022

INVITED TALKS AND PRESENTATIONS

Mock Theta Transformations without Watson
Seminar in Partition Theory, q-Series and Related Topics (Zoom) 16th January , 2025

Transformations and Identities for Mock Modular forms
SASTRA-Ramanujan Award ceremony and International Conference on Number Theory, Kumbakonam, Tamil Nadu, India 21st December, 2024

Mock Theta Transformations without Watson
Invited Talk at the Special Session on partitions and q-series, AMS 2024 Fall Southeastern Sectional Meeting, Georgia Southern University, USA 6th October, 2024

Mock Theta Transformations wihtout Watson
Poster presentation at The Legacy of Ramanujan Conference-Celebrating the 85th birthdays of George E. Andrews and Bruce C. Berndt, Department of Mathematics, Penn State University, USA 8th June, 2024

A New Proof of Zwegers' Theorem
Invited Talk at the GANIT Seminar, Department of Mathematics, IIT Gandhinagar, India
 25th April, 2024

A bijective proof of an identity of Berkovich and Uncu
Invited Talk at the UT Tyler Number Theory and Combinatorics Seminar (Zoom), Department of Mathematics, University Of Texas at Tyler, USA 24th October, 2023

A bijective proof of an identity of Berkovich and Uncu
Invited Talk at the UF Number Theory Seminar, Department of Mathematics, University Of Florida, Gainesville, USA 3rd October, 2023

SERVICE
AND
OUTREACH

Volunteered for Math Fest 2025, University of Florida's annual outreach program at the Department of Mathematics

Organizer of the Graduate Mathematics Association Colloquium at University of Florida (2024-25)

Vice President of the Graduate Mathematics Association at University of Florida (2024-25)

Volunteered for Math Fest 2024, University of Florida's annual outreach program at the Department of Mathematics

Organizer of the Graduate Mathematics Association Colloquium at University of Florida (2023-24)

Vice President of the Graduate Mathematics Association at University of Florida (2023-24)

Volunteered for Mathagon 2020, IIT Gandhinagar's annual outreach program at the Department of Mathematics

Represented Presidency University at the Inter-College Poster making Competition at Inter-college Mathematics poster-making competition at RKM Vidyamandira, Belur, India in 2017.

Represented Presidency University, Kolkata at West Bengal Science Technology Congress Fair by presenting a model and proof of Pick's Theorem in 2017.

SKILLS

Languages: English, Hindi, Bengali

Software Skills: Python, C, MATLAB, Maple

Technical tools: LaTeX, MS-Word, MATLAB, MS-Excel