RESUME MONIMALA NEJ

Department of Mathematics School of Basic and Applied Sciences Adamas University, Barasat, Kolkata-700126 Phone: 980-067-0039 E-mail: monimalanej@gmail.com Homepage: https:

//vidwan.inflibnet.ac.in/profile/161296

Personal Details



Name: MONIMALA NEJ

D/O: TAPAN KUMAR NEJ

Date of Birth: 01/04/1989

Marital Status: MARRIED

Nationality: INDIAN

Education

- Kadra Ashutosh Bibhabari Vidyamandir, SSC, General Courses, 1999 2004
- Badanganj High School, HSC, Science Group, 2004 2006
- Midnapore College, Vidyasagar University, B.Sc. (Hons) Mathematics, 2006 2009
- Visva-Bharati University, M.Sc. Mathematics, 2010 2012
- Shiv Nadar University, Ph.D Mathematics, Aug., 2014 Aug., 2019

Awards

1. 2012 GATE

Project

1. (M.Sc Project) Title: A new travelling wave solution to study solutions and shocks in plasma in presence of Q-nonextensive electrons.

Ph.D Thesis

Title Exponents of Primitive Companion Matrices.

Publications

- 1. Monimala Nej, A. Satyanarayana Reddy. "Binary Strings of Length n with x Zeros and Longest k-runs of Zeros." Indian Journal of Mathematics, 61(1), 2019, 111-139.
- 2. Monimala Nej, A. Satyanarayana Reddy. "Exponents of Primitive Companion Matrices." Rocky Mountain Journal Of Mathematics, 49(5), 2019, 1633-1645.
- 3. Monimala Nej, A. Satyanarayana Reddy. "Exponents of Primitive Symmetric Companion Matrices." Indian Journal Of Discrete Mathematics, 7(1), 2021, 43-66.
- 4. Monimala Nej. "K-Primitivity: A Literature Survey." Submitted.
- 5. Monimala Nej. "A Survey On The Extended Notions Of Primitive Exponent." Work in Progress.
- 6. Utpal Kumar Samanta, Prasanta Chatterjee, Monimala Nej. "Soliton and shocks in pair ion plasma in presence of superthermal electron." Astrophys Space Sci, 345(2), (2013) 291-296. https://doi.org/10.1007/s10509-018-3349-3.

Selected Conferences

- 1. International Conference on Mathematics and its Applications (ICMA-2018), February 15-17, Burdwan University.
 - Title of the of the talk: Exponent set of primitive (0,1)-companion matrices with positive trace.
- 2. Indian Women and Mathematics (IWM) Annual Conference 2018, June 21-23, Shiv Nadar University. Title of the of the talk: Exponents of primitive symmetric companion matrices.
- 3. National Seminar on Mathematical Sciences (NSMS-2020), January 09-11, Burdwan University. Title of the of the talk: Number of $n \times n$ primitive symmetric companion matrices with maximum exponent.
- 4. International Conference on Analysis, Algebra, Combinatorics and their Applications (ICAACA 2020), January 20-22, Jadavpur University.
 - Title of the of the talk : Binary strings of length n with x zeros and longest k-runs of zeros.
- 5. International Conference on Recent Advances in Mathematics, Statistics, and Data Science (RAMSDS 2024), November 27-28, Adamas University.
 - Title of the of the talk : K-Primitivity : A Literature Review.

Participation

- 1. "National Workshop on Mathematics Teaching Under Semester System at Under Graduate Level: Perspectives & Strategies", March 01-02, 2014, Department of Mathematics, Visva-Bharati.
- "National Seminar on Recent Perspectives on Nonlinear Matematics & Its Application", March 25-26, 2014, Department of Mathematics, Visva-Bharati.
- 3. The Summer School in Mathematics on "Fractals: Their Structures, Shadows and Translates", June 29-July 20, 2014, Department of Mathematics, Shiv Nadar University.
- 4. The Advanced Instructional School on "Matrix Analysis", May 02-21, 2016, Department of Mathematics, Shiv Nadar University.
- 5. The Advanced Training in Mathematics Schools: IST on "Advanced Linear Algebra", July 10-22, 2017, Indian Institute of Technology Gandhinagar, Gujrat.
- 6. The Annual Conference of "Indian Women and Mathematics", June 21-23, 2018, Department of Mathematics, Shiv Nadar University.

Work Experience

• Teaching Assistantship

Aug. 2014 - July 2018

Shiv Nadar University

During my Ph.D program, I took classes on the following Math. courses:

- 1. Linear Algebra
- 2. Calculus I
- 3. Calculus II
- 4. Mathematical Methods I
- 5. Introduction to Mathematical Finance

Visiting Faculty

July 2019 - Dec. 2019

College of Engineering and Management, Kolaghat

• Assistant Professor

Dec. 2019 - Present

Adamas University, Barasat, Kolkata

Research And Teaching Interest

Research Interest	Teaching Interest
Matrix Theory	Linear Algebra
 Algebra and Number Theory 	Matrix Analysis
 Biomathematics 	Algebra and Number Theory
 Plasma Physics 	Real Analysis

I hereby declare that the above written particulars are true to best of my knowledge and belief.

Date: January 14, 2025

Place: Midnapore

(Monimala Nej)