

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

| Day 01: August 06, 2025 | | Google Meet Link |
|-------------------------|---|---|
| 09:00-09:30 | INAUGURAL FUNCTION Chief Guest: Prof. Ram N. Mohapatra (University of Central Florida, USA) | https://meet.google.com/oyo-etwm-qrc |
| 09:40-10:30 | Prof. Ram N. Mohapatra (University of Central Florida, USA) Title of Talk: Minimax Techniques in Optimal Control Problems and Machine Learning (Session Chair: Prof. A. Swaminathan (IIT Roorkee)) | |
| 10:40-11:10 | Prof. A. Swaminathan (Indian Institute of Technology Roorkee, India) Title of Talk: Ratio of hypergeometric functions in Function Spaces (Session Chair: Dr. Shakti Prasad (NIT Jamshedpur)) | |
| 11:20-11:50 | Dr. Sheila M. Menchavez (MSU- Iligan Institute of Technology, Philippines) Title of Talk: Biorthogonal Approach to Fractional Poisson Analysis (Session Chair: Dr. Subha Sarkar (NIT Jamshedpur)) | |
| 12:00-13:30 | Contributed Talk (Session 1) (Session Chair: Dr. Pushpendra Kumar (MANIT Bhopal)) | |
| 12:00-13:30 | Contributed Talk (Session 2) (Session Chair: Dr. Anish Kumar (Dr. Shyama Prasad Mukherjee University, India)) | https://meet.google.com/obt-gvuc-ijr |
| BREAK | | |
| 15:00-15:30 | Prof. Árpád Baricz (Babeş-Bolyai University, Cluj-Napoca, Romania Óbuda University, Budapest, Hungary) Title of Talk: Infinitely divisible distributions involving modified Bessel functions (Session Chair: Prof. Saiful Rahman Mondal (King Faisal University, Saudi Arabia)) | https://meet.google.com/oyo-etwm-qrc |
| 15:45-17:15 | Contributed Talk (Session 3) (Session Chair: Dr. Ajit Kumar Singh (SVKM's NMIMS Indore, India)) | |
| 15:45-17:15 | Contributed Talk (Session 4) (Session Chair: Dr. Rajat Kaushik (RIE, NCERT, Bhopal)) | https://meet.google.com/obt-gvuc-ijr |
| 17:45-18:15 | Prof. Carla M. A. Pinto (ISEP-Polytechnic of Porto, Portugal) Title of Talk: The Good, the Bad, and the Evil: A Comprehensive Analysis of Fractional Derivatives in Epidemiological Modeling (Session Chair: Dr. Rajat Tripathi (NIT Jamshedpur)) | https://meet.google.com/oyo-etwm-qrc |
| 18:20-18:50 | Prof. Howard Cohl (National Institute of Standards and Technology, USA) Title of Talk: Product integral representations for Jacobi functions of the first and second kind, Nicholson-type formulas and integral addition theorems (Session Chair: Dr. Rajat Tripathi (NIT Jamshedpur)) | |
| 19:00-19:30 | Dr. Anurag Shukla (Rajkiya Engineering College, Kannauj, India) Title of Talk: Solvability of Nonlinear Differential Equations (Session Chair: Dr. Rajat Tripathi (NIT Jamshedpur)) | |

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

| Day 02: August 07, 2025 | | Google Meet Link |
|--------------------------------|---|---|
| 09:00-10:30 | Contributed Talks (Session 5) (Session Chair: Dr. Rakesh Kumar Meena (JNU, Delhi)) | https://meet.google.com/oyo-etwm-grc?hs=122&authuser=0 |
| 09:00-10:30 | Contributed Talks (Session 6) (Session Chair: Dr. M. Pushpa Latha (S.R.K.R. Engineering College, India)) | https://meet.google.com/obt-gvuc-jjr |
| 11:00-11:30 (Session 1) | Dr. Rajitha Ranasinghe (University of Peradeniya, Srilanka) Title of Talk: Toward a Unified Theory of Bernstein and Markov-type Inequalities in Polynomial, Rational, and q-Difference Settings (Session Chair: Dr. Y. Ramu Naidu (NIT Jamshedpur)) | https://meet.google.com/oyo-etwm-grc?hs=122&authuser=0 |
| 11:00-11:30 (Session 2) | Dr. Subhas Khajanchi (Presidency University, India) Title of Talk: To be updated (Session Chair: Dr. Snehasis Kundu (NIT Jamshedpur)) | https://meet.google.com/obt-gvuc-jjr |
| 11:30-12:00 | Dr. Ratikanta Behera (Indian Institute of Science, Bangalore, India) Title of Talk: Importance of Tensors in Scientific Computing and Data Science (Session Chair: Dr. Y. Ramu Naidu (NIT Jamshedpur)) | https://meet.google.com/oyo-etwm-grc?hs=122&authuser=0 |
| 12:05-12:35 | Dr. Bappaditya Bhowmik (Indian Institute of Technology Kharagpur, India) Title of Talk: Length distortion of curves under meromorphic univalent mappings (Session Chair: Dr. Kanailal Mahato) | |
| 12:40-13:10 (Session 1) | Dr. Sriram Balasubramanian (Indian Institute of Technology Madras, India) Title of Talk: C^*-extreme entanglement breaking maps on operator systems (Session Chair: Dr. Kanailal Mahato) | |
| 12:40-13:10 (Session 2) | Dr. Rajat Kaushik (Regional Institute of Education, Bhopal, India) Title of Talk: Mathematical analysis of Predator-Prey systems and their applications in real-world ecological scenarios (Session Chair: Dr. Samiran Chakraborty (NIT Jamshedpur)) | https://meet.google.com/obt-gvuc-jjr |
| BREAK | | |
| 15:00-15:30 | Dr. Khaled Mehrez (Universite Tunis El Manar, Tunisia) Title of Talk: Bounds for Tur'an-Type inequalities of Sections of Certain Subclasses of Fox–Wright Functions (Session Chair: Dr. Ratnesh Kumar Mishra (NIT Jamshedpur)) | https://meet.google.com/oyo-etwm-grc?hs=122&authuser=0 |
| 15:40-16:10 | Prof. Saiful Rahman Mondal (King Faisal University, Saudi Arabia) Title of Talk: Geometric features of solutions of the second-order differential equations (Session Chair: Dr. Ratnesh Kumar Mishra (NIT Jamshedpur)) | |
| 17:00-17:30 | Valedictory Session Chief Guest: Prof. A. Swaminathan (Indian Institute of Technology Roorkee, India) | |

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

Contributed Talk (Session 1): Date- August 06, 2025; Time- 12:00 to 13:30 (IST)

Google Meet Link: <https://meet.google.com/oyo-etwm-qrc>

Session Chair: Dr. Pushpendra Kumar (MANIT Bhopal, India)

| ID | AUTHOR | TITLE OF TALK |
|-----|---------------------|--|
| 271 | Gayatri Pany | Inertial dynamics in the context of generalized convexity |
| 97 | Pirivina S | On generalized extended Srivastava's triple hypergeometric function and associated properties |
| 236 | Tanuj Kumar | Study of Linear Canonical Hankel Wavelet Transform |
| 256 | Prasadini Mahapatra | Generalized Wavelet Systems and Multiresolution Analysis on Cantor Dyadic and Vilenkin Groups |
| 73 | Gopal Priyadarshi | Numerical solution of hyperbolic inverse partial differential equations using Taylor wavelet method |
| 86 | Nidhi Shukla | Controllability of Impulsive Stochastic Differential Equations |
| 235 | Manish Raghav | CHAIN PROPERTIES OF NON-AUTONOMOUS SYSTEMS UNDER UNIFORM CONVERGENCE |
| 275 | Shraban Das | Coupled potential and L^p Sobolev type spaces associated with coupled fractional Fourier transform |

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

Contributed Talk (Session 2): Date- August 06, 2025; Time- 12:00 to 13:30 (IST)

Google Meet Link: <https://meet.google.com/obt-gvuc-ijr>

Session Chair: Dr. Anish Kumar (Dr. Shyama Prasad Mukherjee University, India)

| ID | AUTHOR | TITLE OF TALK |
|-----|------------------|---|
| 36 | Jeet Sarkar | ENTIRE FUNCTIONS SHARING TWO SMALL FUNCTIONS IM WITH THEIR DIFFERENTIAL-DIFFERENCE OPERATORS |
| 79 | Barun Katoch | Strong Convergence and Stability Analysis of $\mathcal{B}_{\mathcal{K}}$ Iterative Method for Nonlinear Fixed Point Problem |
| 109 | Lakshika Chutani | Analysis of Specific Properties of Entire Dirichlet Series in Several Complex Variables |
| 127 | Vinod Jatav | Exploring Unified Integral Forms of the Generalized Mittag-Leffler Type Function |
| 203 | Ankit Pal | Generalized integral transforms pertaining to five-parameter Mittag-Leffler (ML) function |
| 232 | Md Azizul Hoque | Iteration of Entire Functions with Finite Proximate Order : Sharing Three Values IM |
| 233 | Vinay Shukla | Complex zeros of generic \mathcal{R}_{II} type polynomials |
| 110 | Agnihotri Roy | A class of generalized Mathieu-type series with associated properties and probability distributions |

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

Contributed Talk (Session 3): Date- August 06, 2025; Time- 15:45 to 17:15 (IST)

Google Meet Link: <https://meet.google.com/oyo-etwm-qrc>

Session Chair: Dr. Ajit Kumar Singh (SVKM's NMIMS Indore, India)

| ID | AUTHOR | TITLE OF TALK |
|-----|------------------|---|
| 30 | TANMOY BARMAN | BOUNDEDNESS OF GENERALIZED ONE-SIDED MAXIMAL OPERATOR ON WEIGHTED ONE-SIDED MORREY SPACES |
| 53 | Snehasis Bera | Indefinite inner product on Bicomplex topological modules |
| 240 | Abey Kelil | A Modified Adomian Decomposition Method using New Integral Transform for solving some Dispersive KdV Equations |
| 37 | Uthara S | On Extended Voigt-Type Functions Involving Neumann Function and Their Related Bounds |
| 122 | Sahil Berwal | Generalized Stancu-Durrmeyer type Operators: Voronovskaya Theorems, Gruss Inequalities and Approximation Behavior |
| 12 | Mohabbat Ali | Geometry of Projective Curvature Tensor on a Riemannian Manifold |
| 237 | Vikas Srivastava | p-adic Analytical Methods for Solving the Discrete Logarithm Problem on Certain Classes of Elliptic Curves over Finite Fields |
| 245 | Anish Kumar | Certain geometric properties of Rabotnov function |
| 247 | B Sagar | Numerical simulation of fractional foam drainage equation modeling fluid flow |

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

Contributed Talk (Session 4): Date- August 06, 2025; Time- 15:45 to 17:15 (IST)

Google Meet Link: <https://meet.google.com/obt-gvuc-ijr>

Session Chair: Dr. Rajat Kaushik (RIE, NCERT, Bhopal, India)

| ID | AUTHOR | TITLE OF TALK |
|-----|--------------------|---|
| 119 | Dipankar Saha | Mathematical analysis of the Caputo Fabrizio E cigarette model |
| 155 | Mitali Maji | Application of control theory in an Alzheimer's disease mathematical model |
| 106 | K Ramya | Fractional Tikhonov regularization on non-homogeneous fractional backward heat conduction problems |
| 133 | SHADIYA NASRIN K B | Mittag-Leffler Regression Model for Fenoprofen Data |
| 228 | Mahmoud Moustafa | Dynamical Analysis of Hantavirus Infection Model |
| 145 | Nimai Sarkar | Analyzing Criteria for the Existence of Solution and UH Stability, Asymptotic Behavior of Fractional-Order Nonlinear Volterra Integro-Differential Equations Across Arbitrary Time Scales |
| 246 | Turhan Koprubasi | The properties for the inverse scattering problems of eigenparameter-dependent discrete Sturm-Liouville and Dirac operators |
| 253 | Nesrine IDIOU | Frailty model and dependence structure for bivariate survival data |
| 255 | Shankhadeep Mondal | A Unified Approach to Dual Frame and Dual Pair Optimality for Frame Erasures |

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

Contributed Talk (Session 5): Date- August 07, 2025; Time- 09:00 to 10:30 (IST)

Google Meet Link: <https://meet.google.com/oyo-etwm-qrc>

Session Chair: Dr. Rakesh Kumar Meena (JNU, India)

| ID | AUTHOR | TITLE OF TALK |
|-----|-------------------|---|
| 47 | Bishal Sonar | Spectral Applications of the Closed Neighbourhood Corona Product of Graphs |
| 183 | Rachna Sachdeva | Certain classes of $\$ \$ \$$ -restricted $\$ n \$$ -color compositions |
| 229 | Mehsin Atteya | Stability of Hyper n -Homomorphisms and Hyper n -Derivations in Ternary Algebras |
| 241 | Tapaswini Mohanty | Fourier Analysis in Finite Fields and the Role of the Number Theoretic Transform in Polynomial Multiplication |
| 242 | Neha Neha | Two-Parameter Quantum Numbers and Factorials: A Comprehensive approach |
| 101 | Md Moid Shaikh | Partition regularity of $\$ a+b=cd \$$ Near Zero |
| 182 | Shamik Chatterjee | On A Graph Over $\$ C^*(X) \$$ |
| 251 | Avishek Bist | Linearizations of Quadratic Two-Parameter Matrix Polynomials Via Newton Basis |
| 140 | Kokila Jayakumar | Parameter Estimation for the Fractional Pharmacokinetics Compartment Models |

2nd International Conference on Mathematical Analysis and Applications (MAA 2025)
(In Honour of Prof. Ram N. Mohapatra, University of Central Florida, USA, on the occasion of his retirement)

August 06-07, 2025,

Website: <https://maanitsr.github.io>

SCHEDULE (Tentative)

Time is in IST (UTC+5:30) Format (Indian Standard Time)

Contributed Talk (Session 6): Date- August 07, 2025; Time- 09:00 to 10:30 (IST)

Google Meet Link: <https://meet.google.com/obt-gvuc-ijr>

Session Chair: Dr. M. Pushpa Latha (S.R.K.R. Engineering College, India)

| ID | AUTHOR | TITLE OF TALK |
|-----|---------------------|--|
| 113 | Gannamaneni Charan | Profit investigation for partial batch service queueing system with balking |
| 150 | Nipa Biswas | Memory Effects on Inventory Model of Deteriorating Products with Discount Policy |
| 169 | Sharad Chaudhary | Transient analysis of DSTATCOM system under P, PD, PI and PID controllers |
| 204 | Bikram Dholey | Shear Horizontal Wave Dynamics in Smart Porous–Piezoelectric Systems with Electrically Induced Coupled Spring-Type Interface |
| 224 | Sonu Ram | INERTIAL BASED ALGORITHM FOR ASYMPTOTICALLY DEMICONTRACTIVE OPERATORS IN THE CONTEXT OF THE SCFPP |
| 243 | Nidhi Shukla | Stochastic Control Systems: From Mathematical Foundations to Engineering Implementation - A Comprehensive Survey |
| 194 | MUSKAAN SAINI | Application of triple orbit queue in healthcare sector |
| 266 | Auni Aslah Mat Daud | On The Non-Negativity and Boundedness of Solutions of Compartmental Models with Non-Negative Initial Conditions |