RANPDE-2025 Program
Thursday, March 13. Day I

Department of Mathematics, IIT Madras

KCB 522 (Seminar Hall), 5th floor

8.30 – 8.45 am	**Registration**
8.45 – 9.00 am	**Inauguration by HoD**

Chair: *S. Kesavan*

9.00 – 9.40 am	**Peter Takáč**
	Two positive solutions to a semilinear spectral problem with various convexity nonlinearities
9.40 – 10.20 am	**Rajesh Mahadevan**
	Shape sensitivity analysis for a liquid crystal model
10.20 – 10.40 am	**Tea/Coffee Break**

Chair: *Maya Chhetri*

10.40 – 11.10 am	**Cristian Enache**
	Serrin's problem revisited: the case of the generalized Monge-Ampère equations
11.10 – 11.40 pm	**Oscar Agudelo**
	Multiplicity results for a subcritical Hamiltonian system with concave-convex nonlinearities
11.40 – 12.10 pm	**Sarika Goyal**
	Modified Schrödinger equations involving Stein-Weiss type exponential critical nonlinearity
12.10 – 12.30 pm	***Group Photo Session***
12.30 – 2.00 pm	**Lunch (Taramani Guest House)**

Chair: *Rajesh Mahadevan*

2.00 – 2.30 pm	**Ali Hyder**
	The limiting case of the fractional Caffarelli-Kohn-Nirenberg inequality in dimension one
2.30 – 3.00 pm	**Debdip Ganguly**
	L^2-stability of the Heisenberg Uncertainty Principle on the hyperbolic space
3.00 – 3.30 pm	**Mousomi Bhakta**
	Fractional Schrödinger equations with mixed nonlinearities
3.30 – 4.00 pm	**Tea/Coffee Break**

Chair: *Vladimir Bobkov*

4.00 – 5.30 pm	**Flash Talks (7min+3min)**
	Ardra A, Sagar Basak, Mrityunjoy Ghosh, Shilpa Gupta, Ambalika Halder, Anjali Jaiswal, Ritabrata Jana, Jiya Rose Johnson, Suman Kanungo
5.30 – 6.30 pm	**Visit to the Heritage Center of IITM**

RANPDE-2025 Program
Friday, March 14. Day II

Department of Mathematics, IIT Madras
KCB 522 (Seminar Hall), 5th floor

Chair: *Peter Takáč*

9.00 – 9.40 am	**Sandeep K**
	Semilinear elliptic equations with critical nonlinearity: effect of perturbation
9.40 – 10.20 am	**Maya Chhetri**
	Regularity and explicit L^∞ estimates for a class of elliptic systems
10.20 – 10.40 am	**Tea/Coffee Break**

Chair: *Cristian Enache*

10.40 – 11.10 am	**Sheela Verma**
	Steklov eigenvalues on Doubly connected domains
11.10 – 11.40 pm	**Vladimir Bobkov**
	Payne nodal set conjecture for the fractional p-Laplacian in Steiner symmetric domains
11.40 – 12.10 pm	**Anisa Chorwadwala**
	Optimisation of a mixed Steklov Dirichlet Eigenvalue
12.10 – 2.00 pm	**Lunch (Taramani Guest House)**

Chair: *Sandeep K*

2.00 – 2.30 pm	**Abhishek Sarkar**
	On sharpened singular Adams' type inequalities and applications to a fourth-order equation
2.30 – 3.00 pm	**Abhitosh Upadhyay**
	Optimal geometric inequalities and proximity to geodesic spheres
3.00 – 3.30 pm	**Lakshmi Sankar**
	Sublinear positone and semipositone problems on the exterior of a ball in $\mathbb{R}^2$
3.30 – 4.00 pm	**Tea/Coffee Break**

Chair: *Anisa Chorwadwala*

4.00 – 5.30 pm	**Flash Talks (7min+3min)**
	K Ashok Kumar, Nurun Nesha, Ambesh Kumar Pandey, Sarbani Pramanik, Anusree R, Subhajit Roy, Diksha Saini, Ashmita Singh
7.00 – 9.30 pm	**Special Dinner at IITM Research Park**

RANPDE-2025 Program
Saturday, March 15. Day III

Department of Mathematics, IIT Madras
KCB 522 (Seminar Hall), 5th floor

Chair: *Sarath Sasi*

9.00 – 9.40 am	**Ratnasingham Shivaji**
	Uniqueness of positive solutions for a class of nonlinear elliptic equations with Robin boundary conditions
9.40 – 10.20 am	**Jyotshana V. Prajapat**
	On the moving plane method in the Heisenberg groups
10.20 – 10.40 am	**Tea/Coffee Break**

Chair: *Oscar Agudelo*

10.40 – 11.10 am	**Prosenjit Roy**
	On some critical cases of local and fractional boundary Hardy inequality
11.10 – 11.40 pm	**Arka Mallik**
	Excess decay for quasilinear equations in Heisenberg groups
11.40 – 12.10 pm	**Saikat Mazumdar**
	Stability of the Pohozaev obstruction
12.10 – 2.00 pm	**Lunch (Taramani Guest House)**

Chair: *Mousomi Bhakta*

2.00 – 2.30 pm	**Sarath Sasi**
	Optimal harvesting for a logistic model with grazing
2.30 – 3.00 pm	**Mohan Kumar Mallick**
	NonLinear Liouville Theorem involving pucci extremal operator
3.00 – 3.30 pm	**Bidhan Chandra Sardar**
	Homogeization of semi-linear parabolic optimal contol problem in domain with oscillating boundary
3.30 – 4.00 pm	**Tea/Coffee Break**

Chair: *T. V. Anoop*

4.00 – 5.30 pm	**Scientific discussions, open problems and challenges**
5.30 – 6.30 pm	**Campus Walk**