

38th Annual Conference of the Ramanujan Mathematical Society (RMS 2023)
December 22-24, 2023
IIT Guwahati

DAY-1 (December 22, 2023)

22nd Dec	8:00-8:55	9:00-9:10	9:10-10:05	10:05-10:35	10:50-11:50	11:55-12:55	1:00-2:30	2:40-4:00	4:00-4:20	4:20-5:00	5:20-6:15	6:20-7:20
	Registration (Auditorium)	Inauguration (Auditorium)	Plenary 1 (Auditorium)	High Tea (Auditorium)	ST 1, 2 (Core-5)	ST 3, 4 (Core-5)	Lunch (Conference Center)	CT (Core-5)	Tea (Core-5)	CT (Core-5)	Public Lecture (Auditorium)	GBM (Auditorium)

DAY-2 (December 23, 2023)

23rd Dec	9:00-9:55	10:00-10:30	10:45-11:45	11:50-12:50	1:00-2:30	2:40-3:40	3:45-4:05	4:05-4:25	4:25-5:45	6:00-6:55
	Plenary 2 (Auditorium)	Tea (Auditorium)	ST 5, 6 (Core-5)	ST 7, 8 (Core-5)	Lunch (Conference Center)	ST 9, 10 (Core-5)	CT (Core-5)	Tea (Core-5)	CT (Core-5)	Plenary 3 (Auditorium)

DAY-3 (December 24, 2023)

24th Dec	9:00-9:55	10:00-10:30	10:45-11:45	11:50-12:50	1:00-2:30	2:40-3:40	3:45-4:05	4:05-4:25	4:25-5:25	5:40-6:35	6:40-7:00
	Plenary 4 (Auditorium)	Tea (Auditorium)	ST 11, 12 (Core-5)	ST 13, 14 (Core-5)	Lunch (Conference Center)	ST 15, 16 (Core-5)	CT (Core-5)	Tea (Core-5)	CT (Core-5)	Plenary 5 (Auditorium)	Valedictory (Auditorium)

*Auditorium: Dr. Bhupen Hazarika Auditorium *ST: Symposia Talks *CT: Contributory Talks

*Average walking time from Auditorium to Core-5 is 10 minutes

Plenary/Public Talks

Venue: Dr. Bhupen Hazarika Auditorium

(December 22-24, 2023)

Talk	Date	Time	Speaker	Title of the talk
Plenary 1 (Professor R. Balakrishnan's Endowment Lecture) Chair: Anupam Saikia	22 Dec	9:10-10:05	M. S. Raghunathan (CBS Mumbai)	Two Alumni of Loyola College, Chennai
Public Lecture Chair: Jugal Verma	22 Dec	5:20-6:15	K. Ramasubramanian (IIT Bombay)	The History and Historiography of the Discovery of Calculus in India
Plenary 2 Chair: Panchugopal Bikram	23 Dec	9:00-9:55	Kallol Paul (Jadavpur University)	Geomtery of the space of linear operators from the perspective of Birkhoff-James orthgonality
Plenary 3 Chair: Tony J. Puthenpurakal	23 Dec	6:00-6:55	Gurmeet Kaur Bakshi (Panjab University)	Units in integral group rings
Plenary 4 Chair: Anand Sawant	24 Dec	9:00-9:55	Indranil Biswas (TIFR Mumbai)	Nonabelian Hodge Theory
Plenary 5 Chair: Rajen Kumar Sinha	24 Dec	5:40-6:35	Manjunath Krishnapur (IISc Bangalore)	Nodal sets and nodal domains of random eigenfunctions of the Laplacian

Algebraic Graph Theory

(Venue: Academic Complex - Core 5)

Core-5 class rooms have Green Chalk Boards and Projectors

DAY-1 (December 22, 2023): Symposia Talks				
Symposia	Venue	Time	Speaker	Title of the talk
Algebraic Graph Theory Chairs: Bhaba Kumar Sarma, Sivaramakrishnan Sivasubramanian	5002	10:50-12:55	Sivaramakrishnan Sivasubramanian (IIT Bombay)	Four point condition matrices of edge weighted trees
			Shamik Ghosh (Jadavpur University)	Graphs from rings
			Ranveer Singh (IIT Indore)	Ramanujan graphs (the optimal expanders)
			Projesh Nath Choudhury (IIT Gandhinagar)	Blowup-polynomials of graphs

DAY-2 (December 23, 2023): Symposia Talks				
Symposia	Venue	Time	Speaker	Title of the talk
Algebraic Graph Theory Chairs: Shamik Ghosh, Shariefuddin Pirzada and M. Rajesh Kannan	5002	10:45-12:50	Shariefuddin Pirzada (University of Kashmir)	Ihara zeta function and Ramanujan graphs
			Anirban Banerjee (IISER Kolkata)	Hypergraph symmetries and its spectrum
			Sumit Mohanty (IIM Ranchi)	On the spectral radius of block graphs with prescribed dissociation number ϕ
			S.K.Panda (IIT Kharagpur)	On the signless Laplacian spectrum of K-uniform hypergraphs
		2:40-3:40	Hiranmoy Pal (NIT Rourkela)	A characterization of state transfer on double subdivided stars
			S Selvaraja (IIT Bhubaneswar)	The Herzog-Hibi-Ohsugi conjecture on powers of vertex cover ideals of chordal graphs

Algebraic Graph Theory

(Venue: Academic Complex - Core 5)

DAY-3 (December 24, 2023): Symposia Talks				
Symposia	Venue	Time	Speaker	Title of the talk
Algebraic Graph Theory Chairs: Sasmita Barik, Komal Lochan Patra and Debajit Kalita	5002	10:45-12:50	Kamal Lochan Patra (NISER Bhubaneswar)	On the minimum cut-sets of the power graph of a finite cyclic group
			Rakesh Jana (IIT Bombay)	The bipartite Laplacian matrix of a nonsingular tree
			Debajit Kalita (Tezpur University)	Minimizing algebraic connectivity over graphs constructed with given blocks
			Lavanya Selvaganesh (IIT BHU)	Eccentricity matrix and corona product of graphs - an overview
		2:40-3:40	M. Rajesh Kannan (IIT Hyderabad)	On the eccentricity matrices of trees: inertia and spectral symmetry
		Sasmita Barik (IIT Bhubaneswar)	Singular graphs and the reciprocal eigenvalue property	

*Each Symposia talk is of 30 minutes duration including discussions

Algebraic Graph Theory

(Venue: Academic Complex - Core 5)

DAY-1 (December 22, 2023): Contributory Talks				
Subject	Venue	Time	Speaker	Title of the talk
Algebraic Graph Theory Chair: Projesh Nath Choudhury	5002	2:40-4:00	A Harshitha (MIT, Manipal)	Randic index of a graph with self-loops
			Anita Arora (IISc Bangalore)	Eccentric graph of trees and their cartesian products
			Samiron Parui (NISER Bhubaneswar)	On some general operators of hypergraphs
			Manjil P. Saikia (Ahmedabad University)	Alternating sign matrices with vertical symmetry and plane partitions
Algebraic Graph Theory Chair: Shamik Ghosh	5002	4:20-5:00	Anwita Bhowmik (IIT Guwahati)	Hypergeometric functions for Dirichlet characters and Peisert-like graphs on Z_n
			Sumanta Borah (Dibrugarh University)	On generalized Randic matrix of digraphs

DAY-2 (December 23, 2023): Contributory Talks				
Algebraic Graph Theory Chair: Hiranmoy Pal	5002	3:45-4:05	Idweep J. Gogoi (Dibrugarh University)	On Zagreb energies of some graph operations
Algebraic Graph Theory Chair: Hiranmoy Pal	5002	4:25-5:45	N. Konch (B. Borooah College, Assam)	Some results on A_{α} -spectra of graphs with pockets
			Smrati Pandey (IIT BHU)	Eccentricity matrix of distance regular graphs
			Jesmina Pervin (IIT BHU)	Structural characterization of connected graphs with integer-valued Q-spectral radius
			Shashwath S Shetty (MIT, Manipal)	On the first Zagreb index of graphs with self-loops

DAY-3 (December 24, 2023): Contributory Talks				
Algebraic Graph Theory Chair: K. L. Patra	5002	3:45-4:05	Priyanka Singh (Pt. Deendayal Energy University)	Almost self-centered index of some graphs
Algebraic Graph Theory Chair: Debajit Kalita	5002	4:25-5:05	Gete Umbrey (JNC, Pasighat, Arunachal Pradesh)	Extraction and combination method of Boolean logic simplification
			K V Madhumitha (MIT, Manipal)	KG Sombor energy of graphs with self loops

***Each contributory talk is of 18 minutes duration including discussions**