

CALDAM 2025 Conference Schedule

February 13 – 15, 2025

February 12, 2025	
06:30 PM	Cultural programme at D block ground floor, PSG Tech
07.30 PM	Welcome Dinner at JADE Residency dining hall, PSG Guesthouse
Day 1 (Thursday, Feb 13, 2025)	
https://meet.google.com/cfm-bqfr-xod	
08:00 AM	Registration
08:45 AM	Inauguration
9:15 AM to 10:30 AM	<u>Google Invited Talk – I</u> <u>Chair: TBD</u> Graph products, prime factorization, unique roots and cancellation Wilfried Imrich
10:30 AM to 11: 00 AM	Tea Break
11: 00 AM to 01:05 PM	Graph Theory-1 Chair: TBD
11:00 AM to 11:25 AM	On full-separating sets in graphs Dipayan Chakraborty and Annegret Wagler
11:25 AM to 11:50 AM	On a Tight Bound for the Maximum Number of Vertices that Belong to Every Metric Basis Anni Hakanen, Ville Junnila, Tero Laihonen, Havu Miikonen and Ismael G. Yero
11:50 AM to 12:15 PM	An algebraic characterization of strong graphs Pablo Romero
12:15 PM to 12:40 PM	Generalized Lettericity of Graphs Zhidan Feng, Henning Fernau, Kevin Mann, Indhumathi Raman and Silas Cato Sacher
12:40 PM to 01:05 PM	There are finitely many uniformly most reliable graphs of corank 5 Pablo Romero
01:05 PM to 02:15 PM	Lunch
02:15 PM To 03:55 PM	Graph Algorithms-1 Chair: TBD
02:15 PM to 02:40 PM	Extension Perfect Roman Domination Kevin Mann and Henning Fernau

02:40 PM to 03:05 PM	Packing sets of paths, stars and triangles: tractability and approximability Santiago Ravelo and Flavio K. Miyazawa
03:05 PM to 03:30 PM	Polynomial-time algorithms for PATH COVER on trees and graphs of bounded treewidth Florent Foucaud, Atrayee Majumder, Tobias Mömke and Aida Roshany-Tabrizi
03:30 PM to 03:55 PM	Structural Parameterization of Minus Domination Sangam Balchandar Reddy and Anjeneya Swami Kare
03:55 PM to 04:25 PM	Tea Break
04:25 PM to 06:05 PM	Algorithms and Complexity – 1 Chair: TBD
04:25 PM to 04:50 PM	The MASEMPR problem and its applications in logistics Anand Subramani, K. Subramani, Piotr Wojciechowski and Sangram Kishor Jena
04:50 PM to 05:15 PM	A sub-quadratic algorithm for the minsum one sink location problem on balanced binary tree networks Jannatul Maowa and Robert Benkoczi
05:15 PM to 05:40 PM	Addressing Bias in Algorithmic Solutions: Exploring Vertex Cover and Feedback Vertex Set Sheikh Shakil Akhtar, Jayakrishnan Madathil, Pranabendu Misra and Geevarghese Philip
05:40 PM to 06:05 PM	Partial Domination in Some Geometric Intersection Graphs Madhura Dutta, Anil Maheshwari and Subhas C. Nandy
06.05 PM	CALDAM Business Meeting ACSDM Business Meeting Chair: Subir Kumar Ghosh
06.45 PM	Condolence meeting in memory of Prof. Ajit Arvind Diwan https://meet.google.com/cfm-bqfr-xod
Day 2 (Friday, Feb 14, 2025) https://meet.google.com/cfm-bqfr-xod	
09:15 AM to 10:30 AM	<u>Google Invited Talk - II</u> <u>Chair: TBD</u> Disk Graphs and Transmission Graphs -- Recent Developments Wolfgang Mulzer
10:30 AM To 11:00 AM	Tea Break

11:00 AM to 11:50 AM	Graph Theory - II Chair: TBD
11:00 AM to 11:25 AM	Graceful coloring is computationally hard Cyriac Antony, Jacob Antony, Laavanya D and Devi Yamini S
11:25 AM to 11:50 AM	Broadcast Graph Is NP-complete Jinghan Xu and Zhiyuan Li
11:50 AM to 01:05 PM	Computational Geometry Chair: TBD
11:50 AM to 12:15 PM	Maximizing the Maximum Degree in Ordered Nearest Neighbor Graphs Péter Ágoston, Adrian Dumitrescu, Arsenii Sagdeev, Karamjeet Singh and Ji Zeng
12:15 PM to 12:40 PM	Multipacking in Euclidean Plane Arun Kumar Das, Sandip Das, Sk Samim Islam, Ritam M Mitra and Bodhayan Roy
12:40 PM to 01:05 PM	Almost Empty Monochromatic Polygons in Planar Point Sets Bhaswar Bhattacharya, Sandip Das, Sk Samim Islam and Saumya Sen
1:05 PM to 02:15 PM	Lunch
02:15 PM to 03:05 PM	Graph Algorithms - II Chair: TBD
02:15 PM to 02:40 PM	Parameterized Complexity of Coupon Coloring of Graphs Pradeesha Ashok, Pradyun Devarakonda, Shiven Phogat, Swaroop A Ram Rayala and J A Sherin
02:40 PM to 03:05 PM	On the parameterized Complexity of Odd Coloring Sriram Bhyravarapu, Vinod Reddy and Swati Kumari
03:05 PM to 03:55 PM	Graph Theory - III Chair: TBD
03:05 PM to 03:30 PM	Total Domination and Open Packing in Two Subclasses of Triangle-free Graphs M A Shalu and V K Kirubakaran
03:30 PM to 03:55 PM	Helly Number, Radon Number and Rank in Δ-Convexity on Graphs Bijo S. Anand, Arun Anil, Manoj Changat, Revathy S. Nair and Prasanth G. Narasimha-Shenoi
03:55 PM to 04:25 PM	Tea Break

04:25 PM to 05:40 PM	<u>Google Invited Talk III</u> <u>Chair: TBD</u> Convex Geometries determined by betweenness axioms Manoj Changat
5:40 PM to 6:40 PM	Felicitation of Prof. Manoj Changat on his retirement
7:30 PM	Banquet Dinner
Day 3 (Saturday, Feb 15, 2025) https://meet.google.com/cfm-bqfr-xod	
09:15 AM to 10:30 AM	Algorithms and Complexity - II Chair: TBD
09:15 AM to 09:40 AM	Algorithms and hardness results for the $(3,1)$-cover problem Amirali Madani, Anil Maheshwari, Babak Mirafteb and Bodhayan Roy
09:40 AM to 10:05 AM	Two Step Graph Protection Game Saraswati Girish Nanoti and Aakash Ghosh
10:05 AM to 10:30 AM	Charging Station Placement for Limited Energy Robots Arun Kumar Das
10:30 AM to 11:00 AM	Tea Break
11:00 AM to 11:50 AM	Graph Algorithms - III Chair: TBD
11:00 AM to 11:25 AM	Fast FPT Algorithms for Grundy Number on Dense Graphs Sina Ghasemi Nezhad, Maryam Moghaddas and Fahad Panolan
11:25 AM to 11:50 AM	Polynomial time algorithms for Hop domination Karthika D, Muthucumaraswamy R, Sriram Bhyravarapu and Pritesh Kumar
11:50 AM to 01:05 PM	Graph Theory - IV Chair: TBD
11:50 AM to 12:15 PM	Spectra of eccentricity matrices of product of graphs S. Balamoorthy and T. Kavaskar
12:15 PM to 12:40 PM	Bipartite Domination in Graphs: Complexity and Algorithms Bhawani Sankar Panda, Subhasmita Joshi and Dalu Jacob

12:40 PM to 01:05 PM	Forbidden induced subgraphs in iterative higher order line graphs Aryan Sanghi, Devsi Bantva and Sudebkumar Prasant Pal
01:05 PM	Valedictory
01:20 PM	Lunch