

AUA-UI Workshop on Graph Theory, Combinatorics & Applications (GTCA 2022)

Day 1 (Online)

| Session & Time | Presenter | Title | | |
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| KEYNOTE SPEAKER 9:00-10:00 | PROF. MARTIN BAČA | TYPES OF MODULAR IRREGULAR EVALUATIONS OF GRAPHS | | ONLINE |
| 10:00-10:20 | Dr. V. Murugan | Decomposition of Complete Graphs into Arbitrary Trees | | ONLINE |
| 10:20-10:40 | Ms. Shivani Chauhan | An Introduction to edge Laplacian matrix | | ONLINE |
| Parallel Online Sessions 10:00-11:40 | | Room No. A | Room No. B | |
| | 10:40-11:00 | Dr. Mohamad Abdallah Generalized 4-Connectivity of Alternating Group Networks | Dr. Muhammad Kamran Jamil On generalization of some graph operations and their topological indices | |
| | 11:00-11:20 | Dr. Joseph Clement Topological characterization of larger cavity cycloarenes and its oligomers | Mr. Iswar Mahato Inertia and energy of eccentricity matrices of trees | |
| | 11:20-11:40 | Dr. Mohammad Rizwanullah Measurement of Efficiency and Productivity Using Data Envelopment Analysis [DEA]: A Study of Supply Chain System | Mr. Isyaku Idris Graph Theory Concepts in Infections Control | |
| 12: 15 to 10:00 PM | Social Program: Excursion to Dubai and Workshop Dinner | | | |

AUA-UI Workshop on Graph Theory, Combinatorics & Applications (GTCA 2022)

Day 2 (Face to Face)

| 08:40-09:15 | | | | | Welcome, Registration & Information | | | | | |
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| 09:15-09:30 | | | | | Official Opening (Speech by Dean COS and Chair Mathematical Sciences) | | | | | |
| Session & Time | Presenter | Title | | | | | | | | |
| KEYNOTE SPEAKER 1 9:30-10:00 | PROF. VOLKMAR WELKER | PUBLIC TALK ON "COMBINATORIAL TOOLS FOR PHYLOGENETIC TREES" | | | CIT AUDITORIUM | | | | | |
| 10:30-11:00 | Coffee Break & Group Photo | | | | CIT AUDITORIUM | | | | | |
| KEYNOTE SPEAKER 2 9:45-10:30 | PROF. ISMAEL GONZÁLEZ YERO | THE VARIETY OF GENERAL POSITION PROBLEMS IN GRAPH THEORY | | | CIT AUDITORIUM | | | | | |
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| | | | | | Room No. A | Room No. B | Room No. C | | | |
| Parallel Sessions 11:00-12:30 | 11:00-11:20 | Dr. Bilal Ahmad Rather | Note on distinct eigenvalues of equitable quotient matrices | Dr. Chimere Stanley Anabanti | Group Partition and Ramsey Numbers | Mr. Nikson Simarmata | Graceful Labeling Construction on Chain Tree Graph Using Adjacency Matrix | | | |
| | 11:20-11:40 | Mr. Zeveliano Zidane Barack | Modular Irregularity Strength of Disjoint Union Graphs | Dr. Sammani Danwawu Abdullahi | Some Problems in Discrete Aspects of Stochastic Geometry | Mr. Noman Mazhar | H-MUD: Securing IoT Devices using improved Manufacturer Usage Description device registration process | | | |
| | 11:40-12:00 | Dr. Gemma P. Salasalan | A Variant of Hop Domination in Graphs | Dr. Yuliya Zelenyuk | Counting Symmetric Bracelets | Dr. Krishnan Sivasubramanian | The 2-Steiner Distance Matrix of a Tree | | | |

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| | 12:00-12:20 | Dr. Fei Peng A Construction for Cube Ramsey | Dr. Sarfraz Ahmad On LCM Lattice of the Edge Ideals Associated to the Cycle and Complete Graphs | Mr. Vignesh Ravi Predictive Ability of Open and Closed Neighborhood Degree Sum-Based Topological Descriptors of Breast Cancer Drugs | |
| 12:30-1:30 | Lunch Break | | | | F3 |
| Session & Time | Presenter | Title | | | |
| KEYNOTE SPEAKER 1 13:30-14:15 | PROF. KINKAR CHANDRA DAS | SOME GRAPH INVARIANTS WITH OPEN PROBLEMS IN ALGEBRAIC GRAPH THEORY | | | CIT AUDITORIUM |
| KEYNOTE SPEAKER 2 14:15-15:00 | PROF. HAO HUANG | A NON-UNIFORM EXTENSION OF BARANYAI'S THEOREM | | | CIT AUDITORIUM |
| 15.00-15.30 | Coffee Break | | | | CIT AUDITORIUM |
| Parallel Sessions 15:30-16:30 | | Room No. A | Room No. B | Room No. C | |
| | 15:30-15:50 | Dr. Hend Alrasheed On the Utilization of Shortest Paths in Complex Networks | Dr. Vincent Vajnovszki Fibonacci q-decreasing words: enumerative results and Gray codes | Dr. M. Rosary On Reverse Valency Based Topological Descriptors of Boron Nanotubes | |
| | 15:50-16:10 | Dr. Dorota Kuziak On the Steiner General Position Problem in Graphs | Dr. Tomislav Pejković Some properties of p-adic continued fractions | Dr. Eugen Mandrescu Relationships between $\text{core}(G)$ and $\text{ker}(G)$ of an almost bipartite graph | |
| | 16:10-16:30 | Dr. Stefan Gyürki Goal-minimally k-diametric graphs | Dr. Mario Lefebvre On the number of states in a modified M/M/2/n queueing model | Dr. Milica Andelic An Extended Eigenvalue-Free Interval for the Eccentricity Matrix of Threshold Graphs | |

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| Day 3 | | | | | |
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| Session & Time | Presenter | Title | | | |
| KEYNOTE SPEAKER 1 9:00-9:45 | PROF. SEBASTIAN M. CIOABĂ | SPECTRAL MOORE THEOREMS FOR GRAPHS AND HYPERGRAPHS | | | CIT AUDITORIUM |
| KEYNOTE SPEAKER 2 9:45-10:30 | PROF. KIKI A. SUGENG | SOME NEW RESULTS ON MODULAR IRREGULARITY STRENGTH OF GRAPHS | | | CIT AUDITORIUM |
| 10:30-11:00 | Coffee Break | | | | CIT AUDITORIUM |
| Parallel Sessions 11:00-12:30 | | Room No. A | Room No. B | Room No. C | |
| | 11:00-11:20 | Dr. Denny Riama Silaban Local Antimagic Chromatic Number of Trees | Dr. Imran Javaid Micro and Macro Models of Granular Computing | Dr. Rakesh Jana On the Bipartite Distance Matrix of a Nonsingular Tree | |
| | 11:20-11:40 | Dr. Devsi Bantva Optimal Radio Labelings of the Cartesian Product of Two Graphs | Mr. Hafiz Muhammad Bilal The NF-Number of Two Complete Graphs Joined by a Common Vertex | Ms. Pallabi Manna On some classes of forbidden subgraph of power graphs | |
| 11:40-12:00 | Dr. Vijay Kumar Bhat Independence in Multiresolving Sets of Certain Plane Graphs | Dr. Abdessamad Tridane Stochastic SIR epidemic model on the scale-free networks | Dr. Artem Maksaev Automorphisms of the total graph over a finite field | | |

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| | 12:00-12:20 | Dr. Aparna Lakshmanan S. On Geodesic Leech Labeling of Cycles and Wheels | Dr. Nafaa Chbili Graph Polynomials and the automorphism group | Mr. Santanu Mandal Seidel matrix of chain graphs and threshold graphs | | | |
| 12:30-13:30 | Lunch Break | | | | | | F3 |
| KEYNOTE SPEAKER 13:30-14:15 | PROF. EDY TRI BASKORO | RAMSEY MINIMAL GRAPH FOR MATCHING | | | | | CIT AUDITORIUM |
| KEYNOTE SPEAKER 14:15-15:00 | PROF. VOLKMAR WELKER | MATROID TYPE COMPLEXES WITH ORTHOGONALITY RELATION AND RELATED GRAPHS | | | | | CIT AUDITORIUM |
| Parallel Sessions 15:20-15:40 | | Room No. A | Room No. B | Room No. C | | | |
| | 15:00-15:20 | Dr. Muhammad Kashif Shafiq On Metric Dimension of Subdivision of $P_n \times C_n$ | Dr. Zahid Raza Expected value of first Zagreb connection index in random cyclooctatetraene chain, random polyphenyls chain and random chain network | Ms. Khadija Bibi Randic Index for Hypertree and its Corona Product with other Graphs | | | |
| | 15:20-15:40 | Dr. Syed Ahtsham Ul Haq Bokhary Counting the Numbers of Paths of All Lengths in Symmetric Dendrimers and Its Applications | Dr. Izhar Uddin Fixed Point Theory and its Applications to Graph Theory | Ms. Fareeha Jamal On Inverse Sum Indeg Energy of Graphs | | | |
| 15:35-16:00 | Closing Remark & Coffee Break | | | | | | Outside F3 134 |