

50th SEICCGTC Abstracts

Abdallah, Mohamad	American University of Kuwait	Conditional Strong Matching Preclusion of the Alternating Group Graph
Adachi, Tomoko	Toho University	Secret Sharing Scheme Using Magic Cube and Latin Squares
Adeniran, Ayomikun		Numerical Semigroups
Ahmad, Sarfraz	COMSATS University Islamabad, Pakistan	Topological Descriptor of 2-Dimensional Silicon Carbons and Their Applications
Ahmad, Uzma	University of the Punjab, Pakistan	On Mixed Metric Generators of Graphs
Aiken, Sophie	Colorado College	Hall t-chromatic spectra and weak Hall t-chromatic spectra of the Petersen Graph and wheels with odd numbers of spokes
Ali, Kashif	COMSATS University Islamabad, Pakistan.	M-Polynomials and Topological Indices Related to Graph Operations
Alm, Jeremy	Lamar University	A Sunset Problem in Abelian Groups
Al-ogaidi, Awss	University of Sussez	Large Arcs in Small Planes
Anderson, Mark	Rollins College	Are Complete Graphs the Only α-Robust-Critical Graphs?

Angeleska, Angela	University of Tampa	Modular Decompositions and Coherent Network Partitions
Arunandhi, P.	International Academy	Steiner k-diameter of Tensor Product of Complete Graphs
Asplund, John	Dalton State College	Optimizing Geometric Requirements for Redistricting
Aydin, Nuh	Kenyon College	New Results on Equivalence of Cyclic Codes and a Generalization of a Search Algorithm
Babai, Laszlo	University of Chicago	Global Symmetry from Local Information: The Graph Isomorphism Problem
Bailey, Sean	University of Southern Maine	More Combinatorially Orthogonal Graphs
Balasubramanian, Suman	DePauw University	Some Graph Labelings
Balof, Barry	Whitman College	Bingo Paradoxes
Barkley, Grant	North Carolina State University	Perfect Matchings, Channels, and 2-Divisibility
Barrett, Wayne	Brigham Young University	Spanning 2-Forests and Resistance Distance in 2-Connected Graphs
Barrus, Michael	University of Rhode Island	Connectivity in realization graphs

Baskoro, Edy Tri	Institut Teknologi Bandung, Indonesia.	Ramsey number for a tree versus a small wheel
Bataineh, Mohammad	University of Sharjah, UAE	The Edge metric dimension of multiple wheel graphs
Baumbaugh, Travis	Clemson University	Results on Recursive Generation of de Bruijn Sequences
Beasley, LeRoy	Utah State University	(0, 1)-Matrices and Discrepancy
Beineke, Lowell	Purdue University Fort Wayne	A Survey of Strongly Multiplicative Graphs and Related Labelings
Benakli, Nadia	New York City College of Technology, CUNY	k-Neighborhood Degrees of a Graph
Berliner, Adam	St. Olaf College	Matrix patterns and the inertia S_n
Betten, Anton	Colorado State University	New Families of Cubic Surfaces in Characteristic Two
Bickle, Allan	Penn State Altoona	Independence Number of Maximal Planar Graphs
Bjorkman, Beth	Iowa State University	k-foldability of words
Blanco, Saul	Indiana University Bloomington	A Categorical Approach to Additive Combinatorics
Blumenthal, Adam	Iowa State University	Sharp Bounds for Decomposing Graphs into Edges and Triangles
Boats, Jeffery	University of Detroit, Mercy	The Pansophy of Multipartite Graphs

Bobga, Benkam	University of North Georgia	List Colorings: Some Refinements of Hall's Condition
Bok, Jan	Charles University, Prague, Czech Republic	Extremal problems for weighted Szeged index On Efficient Domination for some classes of H-free bipartite graphs
Brandstadt, Andreas	University of Rostock, Germany	The Volume Bound for Nested Torus Links
Bray, Amie	Colorado State University	The Asymmetric Index of a Graph and Families of Asymmetric Graphs
Brewer, Alejandra	Florida Southern College	Minimising the largest mean first passage time of a Markov chain and the influence of directed graphs
Breen, Jane	Iowa State University	Injective choosability of subcubic planar graphs with girth 6
Brimkov, Boris	Rice University	Perfect Tournament Digraphs
Brown, David	Utah State University	At-least-m-different predicate
Budzisz, Stephanie	Oakland University	Cycles in the burnt pancake graph
Buehrle, Charles	Notre Dame of Maryland University	The Upper Transversal Number of Uniform Hypergraphs
Burcroff, Amanda	University of Michigan	Remarks on Set Membership Filter Efficiency
Burns, Jonathan	Ionic Security	

Bushaw, Neal	Virginia Commonwealth University	The Even Cycle Spectrum
Cameron, Alex	Vanderbilt University	The Saturation Number of Pineapples
Carlson, Josh	Iowa State University	Throttling for the Game of Cops and Robbers
Carrigan, Braxton	Southern Connecticut State University	Decomposing Set Intersection Graphs into Triples
Case, Benjamin	Clemson University	Beta-Packing Sets in Graphs
Chan, W. H.	The Education University of Hong Kong	Bulgarian Nim
Che, Zhongyuan	Penn State University	An upper bound on Wiener Indices of maximal planar graphs
Colbourn, Charles	Arizona State University	Popularity and Steiner Triple Systems
Chisaki, Shoko	Tokyo University of Science	Deopout designs of deep learning
Chowdhury, Sajeeb Roy	Colorado State University	Machine Learning for Better Combinatorial Algorithms
Cohen, Marshall	Morgan State University	Roots of Formal Power Series and New Theorems on Riordan Groups
Collins, Karen	Wesleyan University	Finding Balance in Ferrers Diagrams of Degree Sequences of Split Graphs
Cortez, Joseph	Auburn University	The Intersection Problem for Maximum Packings of K_n with 4-Cycles

Couch PJ	Lamar University	On NFL Scheduling and Thursday Night Football
Cream Megan	Dedar Crest College	Extensions of Pancyclicity
Culver, Eric	University of Colorado, Denver	Finding Rainbow Triangles with Flag Algebra
Curran, Stephen	University of Pittsburgh at Johnstown	C₄-face-magic torus labelings on C_{2m} X C_{2n}
Curtis, Bryan	University of Wyoming	The Strong Orthogonal Property
D'Andrea, Joy	University of South Florida	An Extension of Euler's Polyhedron Formula
Davenport, Dennis	Howard University	3-Zebra Trees
Davis, Killian	Clemson University	Convergences of Newton's Method for Quadratics
De Jesus, Jose F.	University of Puerto Rico	Graphs with the Same Truncated Graphic Matroid Efficient (or less inefficient) computation of the zero forcing number
Deaett, Louiss	Quinnipiac University	The Energy of Ramanujan Graphs
DeDeo, Michelle	University of North Florida	Stack-Sorting, Set Partitions, and Lassalle's Sequence
Defant, Colin	Princeton University	Rainbow Connectivity and Proper Rainbow Connectivity
Dorough, Stephanie	Auburn University	Swapped Dragonfly
Draper, Richard	Center for Computing Sciences/IDA	

Driscoll, Keith	Clayton State University	A Vizing-type result for semi-total domination
Dymacek, Wayne	Washington and Lee University	Claw-free Steinhaus Complements
Earl, Jonathan	University of Wyoming	Minimum Number of Distinct Eigenvalues for Trees
Ekim, Tinaz	Bogazici University	Advances on Equipmatchable Graphs
Ellingham, Mark	Vanderbilt University	Quadrangular embeddings of complete graphs
Elliott, Bradley	Emory University	Increasing Paths in Countable Hypergraphs
Ellis, Brandi	University of West Georgia	Signed magic rectangles with two filled cells in each column: Part 2
Ellis-Monaghan, Jo	Saint Michael's College	Origami Knotting in Graphs
Emany-K, M.R.	University of Puerto Rico, Rio Piedras, PR	The 5-cube Cut Number Problem: A Short Proof for a Basic Lemma
Epstein, Michael	Florida Atlantic University	On the Covering Number of $U_3(q)$
Erickson, Lindsay	Augustana University	Edge-Nim on the $K_{2,n}$
Factor, Kim	Marquette University	Split Domination Results for Tournaments with Connected Domination Graphs
Fan, Jinping	University of Tsukuba	Signature codes for weighted binary adder channel and

Farrelly, Colleen M.	Quantopo, LLC	multimedia fingerprinting Quantum Persistent K-Cores for Community Detection and Ranking Maximum Rectilinear Crossing Numbers of Polyhex Graphs
Feder, Elie	Kingsborough Community College-CUNY	Uniformity in Kirchoff Graphs
Fehribach, Joseph	WPI	Ore and Chvatal-type Degree Conditions for Bootstrap Percolation from Small Sets
Ferrara, Michael	University of Colorado, Denver	Zero forcing in iterated line digraphs
Ferrero, Daniela	Texas State University	On the Structure of 4-Regular Planar Well-Covered Graphs
Finbow, Art	Saint Mary's University	Rigid Linkage Forcing
Flagg, Mary	University of St. Thomas	Approval Gap of Weighted k-Majority Tournaments
Flesch, Breeann	Western Oregon University	On constant sum partitions and applications to distance magic-type graphs
Freyberg, Bryan	University of Minnesota Duluth	How close to being platonic can you get?
Froncek, Dalibor	University of Minnesota, Duluth	Graph-Theoretic Parameters Related to Partial Domination
Ganguly, Soumendra	Clemson University	

Geneson, Jasse	Iowa State University	Throttling for the Cop versus Robber Game
Gershkoff, Zachary	Louisiana State University	Characterization and Enumeration of 3-Regular Permutation Graphs
Glasser, Abraham	Rochester Institute of Technology	Failed Power Domination on Knodel Graphs
Golden, Shannon	Colorado State University	Algebraically Dened Graphs and Their Girth
Golumbic, Martin	University of Haifa, Israel	A Perfect Graph Jubilee
Gould, Ronald	Emory University	On the Saturation Spectrum of Graphs
Graber, Nathan	University of Colorado, Denver	Saturation for Berge Hypergraphs
Graham, Fan Chung	University of California, San Diego	Regularity lemmas for clustering graphs
Graham, Ronald	University of California, San Diego	Bubblesort, Juggling Sequences and Permutation Statistics
Grant, Jennifer	Berkeley University	Aggregate Sequences in Sage
Gray, Daniel	Florida Atlantic University	Split-S-Nim
Grimaldi, Ralph	Rose-Hulman Institute of Technology	Ternary Strings and the Pell Numbers
Haithcock, Evan	Clemson University	Convergences of Newton's Method for Quadratics
Hall, Tracy	New Vistas, LLC	A skeptical perspective on the $2n$ Conjecture

Hallas, Jamie	Western Michigan University	Set-Defined Graph Coloring
Hammer, James	Cedar Crest College	Sudoku Pair Latin Squares
Harborth, Heiko	TU Braunschweig, Germany	Grid Domination on Hexagon Boards
Hartnell, Bert	Saint Mary's University	On graphs in which every maximal induced matching is of the same size
Heath, Emily	University of Illinois	An improved upper bound for the (5,5)-coloring number of K_n
Heinig, Monika	Stevens Institute of Technology/Clyde	Limitations on the Simultaneous Maximization of Two Vulnerability Parameters
Hell, Pavol	Simon Fraser University	Bipartite analogues of comparability and co-comparability graphs
Hernandez-Cruz, Cesar	National Polytechnic Institute	Partitioning a cograph into forests and stable sets
Hilton, Anthony	University of Reading	The Pseudograph and Simple Graph Threshold Number for Bounded Factorizations
Hogben, Lislle	Iowa State University	Extending maximum nullity and zero forcing from graphs to hypergraphs
Holliday, Sarah	Kennesaw State University	Distinct Representatives in Special Set Families in Graphs

Hopkins, Brian	Saint Peter's University	Eriksson's Bulgarian Solitaire Variant Subgraph Removal of 4-Regular Graphs and Changes in Genus Range
Hunter, Hayden	University of South Florida	Pebbling in Chordal Graphs
Hurlbert, Glenn	Virginia Commonwealth University	On Partition Dimension of Infinite Graphs
Imran, Muhammad	United Arab Emirates University	Interval Orders with Length Bounds
Isaak, Garth	Lehigh University	Classifying the Fine Structures of Involutions Acting on Root Systems
Ivy, Samuel	United States Military Academy	Transversal Intersection for further results on the conjecture of exceptional APN functions
Janwa, Heeralal	University of Puerto Rico, Cayey Campus, PR	Wiener index on unicyclic graphs
Jedlickova, Nikola	Charles University, Prague, Czech Republic	A Combinatorial Game On Graphs
Jeffries, Joel	Iowa State University	Mongolian Tents admitted HLS and VHLS labelings
Jialong-Sun	Sacramento Waldorf School	A Mixed Hypergraph Coloring Problem
Johnson, Peter	Auburn University	Deranged Matchings
Johnston, Daniel	Grand Valley State University	On a graph class generalizing interval and permutation graphs
Joveski, Zlatko	Vanderbilt University	

Kaso, Niko	Oakland University	At-least-m-different predicate
Kemnitz, Arnfried	University of Braunschweig, Germany	On the Chromatic Edge Stability Number of Graphs
Kenyon, Catherine	Clemson University	Convergences of Newton's Method for Quadratics
Keranen, Melissa	Michigan Technological University	TS(v;) with cyclic 2-intersecting Gray codes: v 0 or 4 (mod 12)
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Kikas, Lazaros	University of Detroit Mercy	Effect of a Superuser on the Pansophy of a Network
Kleinberg, Jon	Cornell University	Graph-Theoretic Models of Behavioral Phenomena
Kreher, Donald	Michigan Technological University	Sequenceable partial Steiner triple systems
Kritschgau, Jurgen		Rainbow matchings of size m in graphs with total color degree at least 2_{mm}
Krop, Elliot	Clayton State University	Upper bounds for inverse domination in graphs
Lane-Harvard, Liz	University of Central Oklahoma	Strongly Regular Graphs From Large Arcs in Affine Planes
Larson, Craig	Virginia Commonwealth University;	The Graph Brain Project

Laskar, Renu C.	Clemson University	The 2-dimension of a Tree
Lauter, Kristin	Microsoft Research	Supersingular Isogeny Graphs in Cryptography
Leach, David	University of West Georgia	Magic Rectangles with Empty Cells
Lee, Jon	University of Michigan	Volumes of sparse Boolean quadric relaxations
Lefmann, Hanno	TU Chemnitz, Germany	Edge-colorings of hypergraphs avoiding a rainbow expanded complete graph
Leshock, Lorinda	University of Delaware	Pappus Configurations in Finite Planes
Lesniak, Linda	Western Michigan University	Hamiltonian properties in k-partite graphs
Levit, Vadim, E.	Ariel University	W_2-graphs and shedding vertices
Li, Zhongshan (Jason)	Georgia State University	Diagonalizable matrices and cycle structures of their digraphs
Lipman, Drew	Hypergiant - Space Age Solutions	Reconstruction of Graphs from Dominating Sets
Lockard, Shannon	Bridgewater State University	Hyper m-ary Partition Sequences
Lopez, Oscar	Florida Atlantic University	New Recursive techniques to construct combinatorial designs from smaller simple designs
Lorch, John	Ball State University	Mutually Orthogonal Factor-Pair Latin Squares

Low, Richard	San Jose State University	On the Integer-antimagic Spectra of Hamiltonian Graphs
Lorenzen, Kate	Iowa State University	Constructions of distance Laplacian cospectral graphs
Lu, Linyuan	University of South Carolina	The maximum p-Spectral Radius of Hypergraphs with m Edges
Lutrell, Kristi	Seton Hall University	The Maximization of Neighbor-Component Order Connectivity
Marr, Alison	Southwestern University	Zagreb Indices on Directed Graphs
Martin, Sydney	Stonehill College	Minimal Tile and Bond-Edge Types for Self-Assembling DNA Graphs of Triangular Tiles
Martinez,-Rivera, Xavier	Auburn University	The almost-principal minors and ap-rank of symmetric matrices
Mauro, Samantha	Stonehill College	Minimal Tile and Bond-Edge Types for Self-Assembling DNA Graphs of Triangular Tiles
McConnell, Ross	Colorado State University	Min Orderings and the Complements of Threshold Tolerance Graphs
McGinnis, Daniel	New College of Florida,	Extremal Problems Related to the Cardinality Redundance of Graphs

Melekian, Chris	Oakland University	Fractional Matching Preclusion for (Burnt) Pancake Graphs
Merz, Sarah	University of the Pacific	A tight lower bound for the split domination number of a regular tournament
Meyer, Seth	St. Norbert College	Vertex degree sequences mod k
Aaron Meyerowitz	Florida Atlantic University	Generalized Derangements
Meyers, Timothy	Howard University	An Ordered Tuple Construction of Classical Geometric (Clifford) Algebras and Geometric Algebras with Signature
Micek, Piotr	Jagiellonian University	Weak coloring numbers of planar graphs
Milans, Kevin	West Virginia University	Forbidden induced subgraphs and Gallai vertices
Miller, Jordan	Washington State University,	Intersections, circuits, and colorability of line segments
Molina, Robert	Alma College	Reconstruction Numbers for Unicyclic Graphs
Mukthineni, Tarun	Colorado State University	Classifying Spacial Triangulations under Symmetry
Munaro, Andrea	West Virginia University	Semitotal Domination: New hardness results and a polynomial-time algorithm

Narayan, Darren	Rochester Institute of Technology	for graphs of bounded mim-width The Asymmetric Index of a Graph and Balanced Incomplete Block Designs Circular Representations of Simple Connected Graphs & Delta Graph Minimum Semidefinite Rank
Nastas, Evangelos	Florida Atlantic University	Anti-magic Labeling of Cartoon Flowers About Colorings of (3,3)-Uniform Complete Circular Mixed Hypergraphs
Nemani, Serita	Georgian Court University	The Unit-Distance Crossing Number of a Graph Morphisms of complex Hadamard matrices
Newman, N. A.	Troy University	Variations in Ramsey Theory Expected Survival Time of a Probabilistic Counting-Out Game on a Line
Noble, Matt	Middle Georgia State University	JL-colorings on general graphs Genus, Skewness, Thickness and Coloring Theorems
O Cathain, Padraig	Worcester Polytechnic Institute	2-nearly Platonic graphs
Olejniczak, Drake	Western Michigan University	
Ou, Tingting	Johns Hopkins University	
Owens, Andrew	Auburn University	
Pinciu, Val	Southern Connecticut State University	
Qiu, Jiangyi	University of Minnesota, Duluth	

Qiu, Ke	Brock University	Finding One-to-Many Disjoint Shortest Paths in Hypercubes
Qualls, Brittian	McNeese State University	A Note on Bicyclic Antiautomorphisms of Mendelsohn Triple Systems
Raza, Zahid	University of Sharjah, UAE	LCEM and Reciprocal LCEM Matrices
Rehm, Hunter	University of Vermont	Anit-van der Waerden Numbers on Graph Products
Reid, Brooks	California State University, San Marcos	Origins of the International Conferences on Combinatorics, Graph Theory and Computing
Reid, Michael	University of Central Florida	Some recent developments in tiling with polyominoes
Reinhart, Carolyn	Iowa State University	The normalized distance Laplacian Matrix
Reiswig, Josiah	University of South Carolina	On the k-Steiner radius and k-Steiner Diameter of a graph with $4 < k < 5$
Remshagen, Anja	University of West Georgia	Counting Magic Venn Diagrams
Robinette, Michelle	University of Nevada, Las Vegas	On the Likelihood of Symmetrical Cayley Maps for Certain Abelian Groups
Rombach, Puck	University of Vermont	Role coloring graphs in hereditary classes

Ross, Michael	Iowa State University	PSD-Throttling on Trees
Rubalcaba, Roberto	San Diego City College	Aggregate Sequences
Ruskey, Frank	University of Victoria	Solution of an Infinite Nested Recurrence Relation
Saccoman, John T.	Seton Hall University	Integral Regular Split Multigraphs
Salehi, Ebrahim	University of Nevada Las Vegas	On Cordial set of Q_z
Schiermeyer, Ingo	Technische Universitat Bergakademie Freiberg, Germany	Gallai Ramsey numbers of complete graphs and odd cycles
Schmitt, John R.	Middlebury College	Distinct Partial Sums in Cyclic Groups
Schulte, Alex	Iowa State University	Edge Saturation for complete graphs
Schwartz, Andrew	Southeast Missouri State University	Zero Forcing Sets in H-matchable graphs
Servatius, Brigitte	Worcester Polytechnic Institute	Delta-matroids from matroids
Servatius, Herman	Worcester Polytechnic Institute	Delta-matroids from matroids
Shahrokhi, Farhad	University of North Texas	New Results on Location Domination and Identifying Codes
Shu, Michelle	Johns Hopkins University	Survival Probabilities of a Probabilistic Counting-Out Game on a Line
Singgih, Inne	University of South Carolina	Subtractive Magic and Antimagic Total Labeling for Basic Families of Graphs

Sinko, Ann	College of St. Benedict and St. John's University	Game Proper Chromatic Numbers
Skyers, marina	Penn State, Brandywine	A Closer Look at the Fine Structure of the Random Walk on $(0, 1)$ Chromatic Number of the Plane: Breakthroughs and Further Aspirations
Soifer, Alexander	University of Colorado at Colorado Springs	Vertices Deletions in Clustered Spanning Tree
Stern, Michal	Academic College of Tel-Aviv Yaffo	Block-avoiding sequencings of points in Steiner triple systems
Stinson, Douglas	University of Waterloo	On Friendly Index Sets of Barycentric Subdivision of Wheels
Su, Hsin-Hao	Stonehill College	Requirements on Locating Arrays in Practical Experimentation
Syrotiuk, Violet	Arizona State University	On Interval Graphs Represented by Two Interval Sizes
Szwarcfiter, Jayme	Federal Univ of Rio de Janeiro	On z-cycle factorizations with two associate classes
Tiemeyer, Michael	Georgia Southern University	Minimal Tile and Bond-Edge Types for Self-Assembling DNA Graphs of Triangular Tiles
Todt, Heiko	Stonehill College	Balanced and Unbalanced Split Graphs
Trenk, Ann	Wesleyan University	

Trotter, William	Georgia Institute of Technology	Dimension and Height for Posets with Planar Cover Graphs
Tsunoda, Yu	Chiba University	Probabilistic Upper Bound on the Domination Number
van der Holst	Georgia State University	Progress on a characterization of signed graphs (G, E) with $v(G, E) < 3$
Vandell, Chip	Purdue University Fort Wayne	The Maximum Decycling Number of a Graph
Wang, Zhiyu	University of South Carolina	Color-disjoint rainbow spanning trees of edge-colored graphs
Wass, Isaac	Iowa State University	The Graceful Tree Conjecture and Functions with an Attractive Fixed Point
Weiner, Michael	Penn State Altoona	On pattern-avoiding Fishburn permutations
West, Douglas	Zhejiang Normal University and University of Illinois	Cut-edges and Regular Subgraphs in Odd-degree Regular Graphs
Wierman, John	Johns Hopkins University	Site percolation threshold bounds for the $(4,8_2)$ Archimedean tiling
Williams, Trevor	Florida Atlantic University	Graph Nim
Wu, Sylvia	Clemson University	Convergences of Newton's Method for Quadratics
Wu, T.	Northville High School	Steiner $(n-k)$-diameter of some interconnection networks

Xie, Xiao	Johns Hopkins University	Pure and Mixed Multi-Step Strategies for Rendezvous Search on the Platonic Solids
Xu, Rupei	The University of Texas at Dallas	Ulam Decompositions in Sparse Graphs
Yatauro, Michael	Penn State-Brandywine	Stability Theorems and Degree Sequence Theorems in Graph Theory
Young, Derek	Iowa State University	Determining the maximum nullity and minimum rank field independence for some graphs
Zhang, Fuzhen	Nova Southeastern University	Enumerating extreme points of the polytopes of stochastic tensors: an optimization approach