LAWCG22
WORKSHOP ON CLIQUES IN GRAPHS

Technical Sessions

Monday - October 17

	Session 1 - Room 1	Session 2 - Room 2
	Networks	**Geometry**
9:20 - 10:20	On the hardness of finding arc-disjoint branching flows in bm(k, lambda, s)-sufficient networks. Cláudio Carvalho, Jonas Silva, Raul Lopes, Ana Karolinna Maia, Nicolas Nisse and Cláudia Sales	On two-path geometries in digraphs Marisa Gutierrez, Mitre Dourado, Fabio Protti and Silvia Tondato
	Positive results for finding arc-disjoint branching flows on (k, λ, s)-sufficient networks Cláudio Carvalho, Jonas Costa, Raul Lopes, Ana Karolinna Maia, Nicolas Nisse and Cláudia Linhares Sales	From word-representable graphs to altered Tverberg-type theorems Deborah Oliveros and Antonio Torres-Hernandez
	Graph properties on routing problems with time intervals Thailsson Clementino, Rosiane de Freitas and Eduardo Uchoa	A New Heuristic for the Euclidean Steiner Tree Problem in n Dimensions Nelson Maculan and Renan Pinto

	Session 3 - Room 1	Session 4 - Room 2
	Labeling and Coloring	**Domination and Independence**
10:50 - 12:10	Acyclic Coloring of Digraph Products Isnard Costa and Ana Silva	Dominação Romana em Classes de Snarks Guilherme Willian Saraiva da Hora and Atilio Gomes Luiz
	Contributions in scheduling theory and special graph colorings with Jayme Rosiane de Freitas	Domination and Independent Domination Numbers of some Families of Snarks A. A. Pereira and C. N. Campos
	Multicolored Ramsey numbers for 4-cycle and stars Lucas da Penha Soares and Emerson Luiz Do Monte Carmelo	k-independence in some Cartesian products Márcia Cappelle, Erika Coelho, Otávio Mortosa and Julliano Nascimento
	Two infinite families of Type 1 generalized Petersen graphs Sérgio Fusquino, Mauro Nigro and Diana Sasaki	Weighted Connected Matchings Guilherme C. M. Gomes, Bruno P. Masquio, Paulo E. D. Pinto, Vinicius F. dos Santos and Jayme L. Szwarcfiter

	Session 5 - Room 1	Session 6 - Room 2
	Labeling and Coloring	**Graph Classes**
14:50 - 16:10	Equitable total coloring of Semiblowup and Kochol snark families total coloring Isabel F. A. Gonçalves, Simone Dantas and Diana Sasaki	K-comportamiento de gráficas cocordales Lesli Hernández-Sayago, Miguel Pizaña and Rafael Villarroel-Flores
	Edge coloring of split graphs with even maximum degree Cintia Izabel Cararo, Sheila Morais de Almeida, Cândida Nunes da Silva and Glasielly Demori Proença	Hardness of the f-Reversible Process in Directed Graphs Isac Costa, Carlos Vinicius Lima and Thiago Braga Marcilon
	The (p,1)-total number of graphs with maximum degree three Mayara Omai, C. N. Campos and Atílio G. Luiz	How to draw a K(n, 2) Kneser graph? Luerbio Faria, Antonio Sousa, Jonas Carneiro and Mario Pabon
	Estudo sobre (r + 1)-atribuição de papéis para prismas complementares, com r ≥ 3 Diane Castonguay, Elisângela S. Dias, Fernanda N. Mesquita and Julliano R. Nascimento	Fullerene Waves João Pedro Costa and Diego Nicodemos

	Session 7 - Room 1	Session 8 - Room 2
	Labeling and Coloring	**Graph Operations**
16:40 - 18:00	On Total Colouring Bipartite Graphs with at Most Three Bicliques Gustavo Leardini Montanheiro, Leandro Zatesko and Marina Groshaus	On tessellations and graph operations: Adding pendant and false twin vertices Alexandre De Abreu, Celina De Figueiredo, Franklin Marquezino and Daniel Posner
	Local antimagic chromatic number of Bethe trees Francisca Andrea Macedo França, Andre Ebling Brondani and Lara Rodrigues Ventura	Reducing the Time Complexity of Computing Square Roots with Girth at Least Six of a Graph Cristopher Carcereri, Aleffer Rocha and Renato Carmo
	On non-equitable color class configurations for small Type 1 cubic graphs Matheus Adauto, Celina Figueiredo and Diana Sasaki	On iterated clique graphs with exponential growth Miguel Pizaña and Ismael Robles
	Locally irregular decompositions of a class of subcubic graphs Carla Lintzmayer, Guilherme Mota, Lucas Rocha and Maycon Sambinelli	Critical generators of K_5 Gabriela Ravenna and Liliana Alcon

Tuesday - October 18

	Session 9 - Room 1	Session 10 - Room 2
	Graph Classes	**Applications**
9:00 - 10:20	Containment among classes of interval graphs with interval count k Lívia Medeiros, Fabiano Oliveira and Jayme Szwarcfiter	Monkey Hash Map: a highly performant thread-safe map without locks Judismar Arpini Junior and Vinícius G. Pereira de Sá
	On cycle-free-CPT posets Liliana Alcón, Noemí Amalia Gudiño and Marisa Gutierrez	Clique problems in 3D molecular prediction João Alfredo Holanda Bessa Neto, Clarice Santos, Rosiane de Freitas, Micael Oliveira, Jonathas Nunes and Kelson Mota
	Chordal Thinness Bernardo Amorim, Gabriel Coutinho and Vinicius dos Santos	COVID-19 mortality prediction - Perceptron and Random Forest applications João Pedro Marcelino Terra, Luerbio Faria and Fabiano Oliveira
	On two variants of split graphs Luciano Grippo and Verónica Moyano	Restricted Hamming-Huffman trees Min Lin, Fabiano Oliveira, Paulo Pinto, Moysés Sampaio Jr. and Jayme Szwarcfiter

	Session 11 - Room 1	Session 12 - Room 2
	Flow Graphs	**Geometry**
10:50 - 11:50	A simple proof of the bijection between Minimal Feedback Arc Sets and Hamiltonian Paths in tournaments Rafael Schneider and Fábio Botler	Spectral properties of threshold k-uniform hypergraphs Lucas Portugal and Renata Del-Vecchio
	Control flow graph, formal verification and constraint programming techniques Jesse Deveza, Lanier Santos, Rosiane de Freitas and Lucas Cordeiro	On a semidefinite relaxation for the maximum k-colourable subgraph problem Marcel K. de Carli Silva, Gabriel Coutinho, Rafael Grandsire and Thiago Oliveira
	FPT algorithm for feedback vertex set in reducible flow hypergraphs Luerbio Faria, André L. P. Guedes and Lilian Markenzon	Positive semidefiniteness of Aα(G) on some families of graphs with k cycles Carla Oliveira, André Brondani and Victor Melquiades

Wednesday - October 19

	Session 13 - Room 1	Session 14 - Room 2
	Labeling and Coloring	**Computational Complexity**
9:00 - 10:20	On total coloring of subcubic graphs Luerbio Faria, Mauro Nigro and Diana Sasaki	Elecciones con Simetrías Claudia De la Cruz and Miguel Pizaña
	Neighbor distinguishing coloring for cacti graphs Vinícius De Souza Carvalho, Maycon Sambinelli and Carla Negri Lintzmayer	NP-Hardness of perfect rainbow polygons David Flores-Peñaloza and Andrés Fuentes-Hernández
	Edge-Sum Distinguishing game Deise L. de Oliveira, Danilo Artigas, Simone Dantas and Atílio G. Luiz	Parameterized complexity of computing maximum minimal blocking and hitting sets Julio Araujo, Marin Bougeret, Victor Campos and Ignasi Sau
	The (2,1)-total number of powers of paths and powers of cycles M. M. Omai, C. N. Campos and Atílio G. Luiz	Theoretical and empirical analysis of algorithms for the max-npv project scheduling problem Isac M. Lacerda, Rosiane de F. Rodrigues, Eber A. Schmitz and Jayme L. Szwarcfiter

	Session 15 - Room 1	Session 16 - Room 2
	Games	**Graph Classes**
10:50 - 12:10	Some variations of the Tower of Hanoi and their graph properties Lia Martins, Meng Hsu, Raquel Folz and Rosiane De Freitas	On the Helly Number of trees Moisés Carvalho, Simone Dantas, Mitre Dourado, Daniel Posner and Jayme Szwarcfiter
	The Conflict-Free coloring game and cliques Paola Tatiana Huaynoca, Miguel Palma and Simone Dantas	On the Biclique Graphs of Circular Arc Bigraphs Fabricio Schiavon Kolberg, Marina Groshaus and André L. P. Guedes
	Hardness of general position games Ullas Chandran S.V., Sandi Klavzar, Neethu P. K. and Rudini Sampaio	Tree 3-spanners on prisms of graphs Renzo Gomez, Flavio K. Miyazawa and Yoshiko Wakabayashi
	Notes on graph variations of the NIM game Raquel Folz, Meng Hsu, Lia Martins and Rosiane de Freitas	Extendiendo Gráficas Cuadrado-complementarias Ariadna Juarez-Valencia and Miguel Pizaña

	Session 17 - Room 1	Session 18 - Room 2
	Computational Complexity	**Labeling and Coloring**
13:50 - 15:10	The Terminal Connection Problem on Rooted Directed Path Graphs is NP-complete Alexsander Melo, Celina Figueiredo, Ana Silva and Uéverton Souza	O Número Cromático Total de Grafos Split 2-admissíveis Diego Amaro Costa, Sulamita Klein and Fernanda Couto
	Subdivisions with Parity in Digraphs Marcus Vinicius Martins Melo and Ana Karolinna Maia	Neighbour-distinguishing edge-labelling of powers of paths Luis Gustavo Da Soledade Gonzaga and Christiane Neme Campos
	The absolute oriented clique number problem is NP-complete Erika Morais Martins Coelho, Hebert Coelho, Luerbio Faria, Mateus de Paula Ferreira and Sulamita Klein	Hunting a conformable fullerene nanodisc that is not 4-total colorable Mariana Cruz, Celina Figueiredo, Diana Sasaki, Marcus Vinicius Tovar Costa and Diego Nicodemos
	Hard instances for the maximum clique problem Rodrigo Nogueira, Victor Campos and Renato Carmo	A New Bound for the Sum of Squares of Degrees in a Class 2 Graph Thiago Cunha and Leandro Zatesko