Mexican Conference on Discrete Mathematics and Computational Geometry
Honoring Jorge Urrutia on the occasion of his 60th birthday

PROGRAM

Sunday, November 10, 2013
18:00-18:30  Registration
18:30-19:30  Welcome reception

Monday, November 11, 2013
8:45-9:15    Conference Registration
9:15-9:30    Opening ceremony
9:30-10:20   Invited Talk
              Jin Akiyama, to be announced.
10:20-10:55  Coffee break

Sesion 1
10:55-11:20  A Note on Maximal Plane Subgraphs of the Twisted Graph Containing Perfect Matchings
              Elsa Omaña-Pulido and Eduardo Rivera-Campo.
11:20-11:45  A characterization of $P_5$-free graphs with a homeomorphically irreducible spanning tree
              Shoichi Tsuchiya, Jennifer Diemunsch, Michitaka Furuya, Maryam Sharifzadeh, David Wang, Jennifer Wise and Elyse Yeager.
11:45-12:10  On the Erdős-Faber-Lovász conjecture: resolvable designs and commutative quasigroups
              Gabriela Araujo, Christian Rubio and Adrián Vázquez.
12:10-12:35  Coffee break

Session 2
12:35-13:00  Family of sub-removable and anti-sub-removable graphs
13:00-13:25  Geometric Spanning Cycles in Bichromatic Point Sets
              Benson Joeris, Jorge Urrutia and Isabel Urrutia-Schroeder.
13:25-16:30  Lunch

Sesion 2
10:55-11:20  Empty triangles in good drawings of the complete graph
              Oswin Aichholzer, Thomas Hackl, Alexander Pilz, Pedro Ramos, Vera Sacristan and Birgit Vogtenhuber.
11:20-11:45  Witness-Bar Visibility Graphs
              Carmen Cortés, Ferran Hurtado, Alberto Márquez and Jesús Valenzuela.
11:45-12:10  Beyond Homothetic Polygons
              Jan Kratochvíl.
12:10-12:35  Coffee break

Session 3
16:30-16:55  Geometric Biplane Graphs I: Maximal Graphs
              Alfredo García, Ferran Hurtado, Matías Korman, Inês Matos, Maria Saumell, Rodrigo Silveira, Javier Tejel and Csaba Tóth.
16:55-17:20  Geometric Biplane Graphs II: Graph Augmentation
              Javier Tejel, Alfredo García, Ferran Hurtado, Matías Korman, Inês Matos, Maria Saumell, Rodrigo Silveira, and Csaba Tóth.
17:20-19:30  Welcome Reception

Tuesday, November 12, 2013
9:30-10:20   Invited Talk
              János Pach, to be announced.
10:20-10:55  Coffee break
12:10-12:35  Coffee break

Sesion 1
10:55-11:20  A Note on Maximal Plane Subgraphs of the Twisted Graph Containing Perfect Matchings
              Elsa Omaña-Pulido and Eduardo Rivera-Campo.
11:20-11:45  A characterization of $P_5$-free graphs with a homeomorphically irreducible spanning tree
              Shoichi Tsuchiya, Jennifer Diemunsch, Michitaka Furuya, Maryam Sharifzadeh, David Wang, Jennifer Wise and Elyse Yeager.
11:45-12:10  On the Erdős-Faber-Lovász conjecture: resolvable designs and commutative quasigroups
              Gabriela Araujo, Christian Rubio and Adrián Vázquez.
12:10-12:35  Coffee break

Session 2
12:35-13:00  Morphing Planar Graph Drawings with Unidirectional Moves
              Fidel Barrera-Cruz, Penny Haxell and Anna Lubiw.
13:00-13:25  Weight-Equitable Subdivision of Red and Blue Points in the Plane
              Jude Buot and Mikio Kano.
13:25-16:30  Lunch
Wednesday, November 13, 2013

9:30-10:20 Invited Talk
Ferran Hurtado, Some problems along the way.

10:20-10:55 Coffee break

Sesion 1
10:55-11:20 Connectivity with Directional Antennas in the Symmetric Communication Model

11:20-11:45 A Topological Perspective of Recursion in Distributed Computing
Juan Onofre and Sergio Rajsbaum.

11:45-12:10 Integer programming in geometric tomography
Ábris Nagy and Csaba Vincze.

12:10-12:35 Coffee break

Sesion 2
12:35-13:00 Computing containment relations between Rectilinear Convex Hulls
Carlos Alegría-Galicia, Carlos Seara and Jorge Urrutia.

Canek Pélaez, Adriana Ramírez-Vigueras, Carlos Seara and Jorge Urrutia.

13:25-16:30 Lunch

Thursday, November 13, 2013

9:30-10:20 Invited Talk
Oswin Aichholzer, Good drawings and rotation systems of complete graphs.

10:20-10:55 Coffee break

Sesion 1
10:55-11:20 Extremal antipodal polygons and polytopes
Oswin Aichholzer, Luis Evaristo Caraballo, José-Miguel Díaz-Báñez, Ruy Fabila-Monroy, Carlos Ochoa and Paul Nigsch.

11:20-11:45 Packing and Covering a Polygon with Geodesic Disks
Ivo Vigan.

11:45-12:10 A minimal convex decomposition
Mario Lomelí-Haro.

12:10-12:35 Coffee break

Sesion 2
12:35-13:00 Polygon Matching and Indexing Under Affine Transformations
Ana Cristina Chavez-Caliz, Edgar Chavez and Jorge L. López-López.

13:00-13:25 Isoperimetric Enclosures
Luis Barba, Stefan Langerman, Greg Aloupis, Diane Souvaine and Jean-Lou De Carufel.

13:25-16:30 Lunch

Friday, November 14, 2013

9:30-10:20 Invited Talk
Luis Montejano, to be announced.

10:20-10:55 Coffee break

Sesion 1
10:55-11:20 A numerical attack on Reinhardt’s conjecture
Yoav Kallus.

11:20-11:45 Continuous flattening of truncated tetrahedra
Jin-Ichi Itoh and Chie Nara.

11:45-12:10 Kinetic Bipartite Minimum Weight Matching
Ruy Fabila-Monroy, Hernán González-Aguilar, Dolores Lara and Jorge Urrutia.

12:10-12:35 Coffee break

Sesion 2
12:35-13:00 On the Spanner Properties of the Half Space Proximal Graph
Guillermo Ruiz and Edgar Chavez.

13:00-13:25 Computational search of small point sets with small rectilinear crossing number
Ruy Fabila-Monroy and Jorge López.