EGC2011 PROGRAM

Sunday June 26, 2011

19:30 - 20:30 Welcome reception

Monday June 27, 2011

08:45 - 09:15 Registration

09:15 - 09:30 Opening ceremony

09:30 - 10:15 Invited talk

Generic distributed actuation of lattice-based modular robotic systems
Vera Sacristán

10:15 - 11:00 Session 1.1

10:15 - 10:30 Convexifying monotone polygons while maintaining internal visibility
Oswin Aichholzer, Mario Cetina, Ruy Fabila-Monroy, Jesús Leaños, Gelasio Salazar, Jorge Urrutia

10:30 - 10:45 Face guards for art galleries
Diane L. Souvaine, Raoul Veroy, Andrew Winslow

10:45 - 11:00 Dynamic circle separability between convex polygons
Luis Barba, Jorge Urrutia

11:00 - 11:30 Coffee break

11:30 - 12:15 Session 1.2

11:30 - 11:45 The chromatic number of the convex segment disjointness graph
Ruy Fabila-Monroy, David R. Wood

11:45 - 12:00 Notes on the twisted graph
Elsa Omaña-Pulido, Eduardo Rivera-Campo

12:00 - 12:15 Non-crossing configurations revisited
Anna de Mier, Marc Noy

12:15 - 13:00 Invited talk

On 5-gons and 5-holes
Oswin Aichholzer, Thomas Hackl, Birgit Vogtenhuber

13:00 - 15:00 Lunch

15:00 - 15:45 Invited talk

The art of polyhedra
Jin Akiyama

15:45 - 16:30 Session 1.3 Postponed because of an electrical power disruption.

16:30 - 17:00 Coffee break Moved earlier.

17:00 - 18:15 Session 1.4 Postponed because of an electrical power disruption.

Tuesday June 28, 2011

09:00 - 09:45 Invited talk

On edge-disjoint empty triangles of point sets
Javier Cano, L.F. Barba, Toshinori Sakai, Jorge Urrutia

09:45- 11:00 Session 2.1

09:45 - 10:00 Sweeping an oval to a vanishing point
Adrian Dumitrescu, Minghui Jiang

10:00 - 10:15 A generalization of the source unfolding of convex polyhedra
Erik D. Demaine, Anna Lubiw

10:15 - 10:30 Continuous flattening of convex polyhedra
Jin-ichi Itoh, Chie Nara, Costin Vîlcu

10:30 - 10:45 Empty disks supported by a point set
Kiyoshi Hosono, Masatsugu Urabe

10:45 - 11:00 A note on the number of empty triangles
Alfredo García

11:00 - 11:30 Coffee break

11:30 - 12:15 Session 2.2

11:30 - 11:45 Delaunay triangulation of imprecise points, preprocess and actually get a fast query time
Olivier Devillers

11:45 - 12:00 Hyperbolic Delaunay triangulations and Voronoi diagrams made practical
Mikhail Bogdanov, Olivier Devillers, Monique Teillaud

12:00 - 12:15 Improving shortest paths in the Delaunay triangulation
Manuel Abellanas, Mercè Claverol, Gregorio Hernández, Ferran Hurtado,Vera Sacristán, Maria Saumell, Rodrigo I. Silveira

12:15 - 13:00 Invited talk

Geometric puzzles: Algorithms and complexity
Erik D. Demaine

13:00 - 15:00 Lunch

15:00 - 15:45 Invited talk

Approximation algorithms for optimal covering tours in geometric settings
Joseph S. B. Mitchell

15:45 - 16:15 Session 2.3

15:45 - 16:00 Compact grid representation of graphs
José Cáceres, Carmen Cortés, Clara Isabel Grima, Masahiro Hachimori, Alberto Márquez, Raiji Mukae, Atsuhiro Nakamoto, Seiya Negami, Rafael Robles, Jesús Valenzuela

16:00 - 16:15 Large angle crossing drawings of planar graphs in subquadratic area
Patrizio Angelini, Giuseppe Di Battista, Walter Didimo, Fabrizio Frati, Seok-Hee Hong, Michael Kaufmann, Giuseppe Liotta, Anna Lubiw

16:15 - 16:45 Coffee break

16:45 - 18:15 Session 2.4

16:45 - 17:00 Euclidean arrangements of n pseudolines with one n-gon are stretchable
Jesús Leaños, Christophe Ndjatchi-Mbe-Koua, Luis Manuel Rivera-Martínez

17:00 - 17:15 Quadrangulations on 3-colored point sets with Steiner points
Sho Kato, Ryuichi Mori, Atsuhiro Nakamoto

17:15 - 17:30 Simultaneously flippable edges in triangulations
Diane L. Souvaine, Csaba D. Tóth, Andrew Winslow

17:30 - 17:45 Blocking the k-holes of point sets on the plane
Javier Cano, Alfredo García, Ferran Hurtado, Toshinori Sakai, Javier Tejel, Jorge Urrutia

17:45 - 18:00 Compatible matchings in geometric graphs
Oswin Aichholzer, Alfredo García, Ferran Hurtado, Javier Tejel

18:00 - 18:15 String-wrapped rotating disks
Joseph O'Rourke

18:15 - 18:45 Business meeting

Wednesday June 29, 2011

09:00 - 09:45 Invited talk

Local transformations in geometrical structures
Alberto Márquez

09:45 - 10:45 Session 3.1

09:45 - 10:00 On the number of radial orderings of colored planar point sets
José Miguel Díaz-Báñez, Ruy Fabila-Monroy, Pablo Pérez-Lantero

10:00 - 10:15 Geometric graphs in the plane lattice with L-line segments
Mikio Kano, Kazuhiro Suzuki

10:15 - 10:30 A note on diagonal transformations on maximal planar graphs containing perfect matchings
Ferran Hurtado, Marc Noy, Eduardo Rivera-Campo

10:30 - 10:45 Polytopal complexes realizing products of graphs
António Guedes de Oliveira, Edward D. Kim, Marc Noy, Arnau Padrol, Julian Pfeifle, Vincent Pilaud

10:45 - 11:15 Coffee break

11:15 - 12:15 Session 3.2

11:15 - 11:30 Object recognition using Delaunay triangulation
Russel Apu, Marina Gavrilova

11:30 - 11:45 Parallel Delaunay triangulation based on Lawson's incremental insertion
Narcís Coll, Marité Guerrieri

11:45 - 12:00 Connecting red cells in a bichromatic Voronoi diagram
Manuel Abellanas, Antonio L. Bajuelos, Santiago Canales, Mercè Claverol, Gregorio Hernández, Inês Matos

12:00 - 12:15 Sensor recalibration with Voronoi diagrams
Belén Palop

12:15 - 13:00 Invited talk

Recent results on plane geometric spanner
Prosenjit Bose

13:00 - 15:00 Lunch

15:00 - 15:45 Invited talk

Erdős-Szekeres-type theorems for convex bodies
János Pach

15:45 - 16:15 Session 3.3

15:45 - 16:00 Spiral serpentine polygonization of a planar point set
Justin Iwerks, Joseph S. B. Mitchell

16:00 - 16:15 Rectilinear convex hull with minimum area
Carlos Alegría-Galicia, Tzolkin Garduño, Areli Rosas-Navarrete, Carlos Seara, Jorge Urrutia

16:15 - 16:45 Coffee break

16:45 - 18:15 Session 3.4

16:45 - 17:00 Locating a service facility and a rapid transit line
José Miguel Díaz-Báñez, Matías Korman, Pablo Pérez-Lantero, Inmaculada Ventura

17:00 - 17:15 The 1-center and 1-highway problem
José Miguel Díaz-Báñez, Matías Korman, Pablo Pérez-Lantero, Inmaculada Ventura

17:15 - 17:30 Longest-edge refinement schemes for real-time terrain triangulations
Lucana Santos, José Pablo Suárez, Ángel Plaza

17:30 - 17:45 A lower bound on the angles of triangles constructed by LE-trisection
Francisco Perdomo, Ángel Plaza, Eduardo Quevedo, José P. Suárez

17:45 - 18:00 Meshes preserving minimum feature size
Greg Aloupis, Erik D. Demaine, Martin L. Demaine, Vida Dujmović, John Iacono

18:00 - 18:15 Measuring regularity of convex polygons: experimental results
Ramon Chalmeta, Vera Sacristán, Maria Saumell

21:00 - 23:00 Conference dinner

Thursday June 30, 2011

09:00 - 09:45 Session 4.1

09:00 - 09:15 Multiple range searching on the GPU
Marta Fort, J. Antoni Sellarès

09:15 - 09:30 Metaheuristic approaches for MWT and MWPT problems
Maria Gisela Dorzán, Edilma Olinda Gagliardi, Gregorio Hernández Peñalver, Mario Guillermo Leguizamón

09:30 - 09:45 Solving the minimum vertex floodlight problem with hybrid metaheuristics
Antonio L. Bajuelos, Santiago Canales, Gregorio Hernández, Mafalda Martins

09:45 - 10:15 Coffee break

10:15 - 11:15 Session 4.2

10:15 - 10:30 Heavy non-crossing increasing paths and matchings on point sets
Toshinori Sakai, Jorge Urrutia

10:30 - 10:45 Covering islands in plane point sets
Ruy Fabila-Monroy, Clemens Huemer

10:45 - 11:00 Separated matchings in convex point sets with small discrepancy
Viola Mészáros

11:00 - 11:15 Convex blocking and partial orders on the plane
José Miguel Díaz-Báñez, Marco Antonio Heredia, Canek Peláez, J. Antoni Sellarès, Jorge Urrutia, Inmaculada Ventura

11:15 - 11:45 Coffee break

11:45 - 12:45 Session 4.3

11:45 - 12:00 Generalizing the Steiner-Lehmus theorem using the Gröbner cover
Antonio Montes, Tomás Recio

12:00 - 12:15 Red-blue minimum separating circle with a moving blue point
Yam-Ki Cheung, Ovidiu Dasecu, Marko Zivanic

12:15 - 12:30 Weak separators, vector dominance, and the dual space
Canek Peláez, Adriana Ramírez-Vigueras, Carlos Seara, Jorge Urrutia

12:30 - 12:45 Explicit array-based compact data structures for planar and surface meshes
Luca Castelli Aleardi, Olivier Devillers

12:45 - 13:30 Invited talk

Linking geometric objects
Manuel Abellanas