CCCG 2016

Schedule of Events

All sessions and the reception are held at Simon Fraser University's Vancouver Campus (in the building known as Harbour Centre). The street address is 515 West Hastings Street, Vancouver.

Please note that there have been some changes for the first full day of the conference (August 3). These are shown in red on the next page.

Tuesday, August 2	
18:00 Teck Gallery (Room 1305)	Reception
20:00	Reception ends

9:00 Room 1900

There will be no plenary talk on August 3. The conference starts with coffee and morning snacks at 10:00

10:00

Break

10:30 **Session 1A**

Room 1900

- Square Formation by Asynchronous Oblivious Robots. Giovanni Viglietta and Marcello Mamino .
- Finding Points in General Position.
 Vincent Froese, Iyad Kanj, André Nichterlein and Rolf Niedermeier.

changed time

Searching with Advice: Robot Fence-Jumping.
 Kostantinos Georgiou, Evangelos Kranakis and Alexandra Steau.

10:30 **Session 1B** *Room 1700*

- On the Stability of Medial Axis of a Union of Balls in the Plane.
 David Letscher and Kyle Sykes.
- kth Nearest Neighbor Sampling in the Plane. Kirk Gardner and Don Sheehy.
- NearptD: A Parallel Implementation of Exact Nearest Neighbor Search using a Uniform Grid.

David Hedin and W Randolph Franklin.

 Realizing Farthest-Point Voronoi Diagrams.
 Therese Biedl, Carsten Grimm, Leonidas Palios, Jonathan Shewchuk and Sander Verdonschot.

11:50 *L*

Lunch (on own)

14:00 Room 1700

Open Problem Session

15:00

Break

15:30 **Session 2** *Room 1700*

- Recognition of Triangulation Duals of Simple Polygons With and Without Holes.
 Martin Derka, Alejandro Lopez-Ortiz and Daniela Maftuleac.
- Sliding k-Transmitters: Hardness and Approximation. Therese Biedl, Saeed Mehrabi and Ziting Yu.
- The Length of the Beacon Attraction Trajectory.
 Bahram Kouhestani, David Rappaport and Kai Salomaa.
- A Competitive Strategy for Walking in Generalized streets for a Simple Robot.
 Azadeh Tabatabaei, Fardin Shapouri and Mohammad Ghodsi.

16:50

Day finishes

9:00 Room 1900

Plenary talk: John Iacono

10:00

Break

10:30 **Session 3A** *Room 1900*

- Polynomial volume point set embedding of graphs in 3D.
 Farshad Barahimi and Steve Wismath.
- Boundary Labeling with Obstacles.

Martin Fink and Subhash Suri.

Štěpán Šimsa and Martin Töpfer.

- On the Biplanar Crossing Number of K_n.
 Stephane Durocher, Ellen Gethner and Debajyoti Mondal.
- Squarability of rectangle arrangements.
 Matěj Konečný, Stanislav Kučera, Michal Opler, Jakub Sosnovec,

10:30 **Session 3B**

Room 1700

• Transforming Hierarchical Trees on Metric Spaces.

Mahmoodreza Jahanseir and Don Sheehy.

- On the Triangulation of non-fat Imprecise Points.
 Vahideh Keikha, Ali Mohades and Mansoor Davoodi Monfared.
- On the Precision to Sort Line-Quadric Intersections.

Michael Deakin and Jack Snoeyink.

Adaptive Metrics for Adaptive Samples.
 Nicholas Cavanna and Don Sheehy.

11:50

Lunch (on own)

14:00 Room 1700

Business meeting

15:00

Break

15:30 **Session 4A** *Room 1900*

Geometric Spanners Merging and its Applications.

Davood Bakhshesh and Mohammad Farshi.

 A Faster Algorithm for the Minimum Red-Blue-Purple Spanning Graph Problem for Points on a Circle.

Ahmad Biniaz, Prosenjit Bose, Ingo van Duijn, Anil Maheshwari and Michiel Smid.

• Partitions of planar point sets into polygons.

Ajit Diwan and Bodhayan Roy.

Counting Convex k-gons in an Arrangement of Line Segments.

Martin Fink, Neeraj Kumar and Subhash Suri.

15:30 **Session 4B** *Room 1700*

- A Fast 2-Approximation Algorithm for Guarding Orthogonal Terrains.
 Yangdi Lyu and Alper Ungor.
- An Iterative Refinement Scheme of Dominating Guards and Witnesses for Art Gallery Problems.

Eyup Serdar Ayaz and Alper Ungor.

• Minimizing the Trihedral Angle Sum of Orthogonal Polyhedra and Illuminating them with Orthogonal Fluorescent Lights.

Mazay Oswaldo Jimenez-Salinas, Jorge Urrutia Galicia, Israel Aldana, Jose Luis Alvarez Rebollar, Juan Carlos Catana Salazar and Erick Solis Villareal.

• The Planar Slope Number. Udo Hoffmann.

16:50

Day finishes

9:00 Room 1900

Plenary talk: Richard (Hao) Zhang

10:00

Break

10:30 **Session 5A** *Room 1900*

- Epsilon-covering: a greedy optimal algorithm for simple shapes. Tuong Nguyen and Isabelle Sivignon.
- Geometric Unique Set Cover on Unit Disks and Unit Squares.
 Saeed Mehrabi.
- Stabbing Line Segments with Disks and Related Problems.
 Raghunath Reddy Madireddy and Apurva Mudgal.
- Critical Placements of a Square or Circle amidst Trajectories for Junction Detection.

Ingo van Duijn, Irina Kostitsyna, Marc Van Kreveld and Maarten Löffler.

10:30 **Session 5B** *Room 1700*

- Smallest Paths with Restricted Orientations in Simple Polygons.
 Jillian Dicker and Joseph Peters.
- Exact Solutions for the Geometric Firefighter Problem.
 Mauricio J. O. Zambon, Pedro J. de Rezende and Cid C. de Souza.
- Progressive Alignment of Shapes.
- Ashwin Gopinath, David Kirkpatrick, Paul Rothemund and Chris Thachuk
- Rectangle-of-influence triangulations.
 Therese Biedl, Anna Lubiw, Saeed Mehrabi and Sander Verdonschot.

11:50

Lunch (on own)

14:00 **Session 6A** *Room 1900*

- Maximum Area Rectangle Separating Red and Blue Points. Bogdan Armaselu and Ovidiu Daescu.
- Characterizing minimum-length coordinated motions for two discs.
 David Kirkpatrick and Paul Liu.
- Maximizing the Sum of Radii of Disjoint Balls or Disks. David Eppstein.

14:00 **Session 6B** *Room 1700*

- On the Number of Forceless Hint Sequences in Paint-by-Numbers Puzzles.
 Shira Zucker and Daniel Berend.
- An upper bound of 84 for Morpion Solitaire 5D.
 Henryk Michalewski, Andrzej Nagórko and Jakub Pawlewicz.
- Kernelizing Buttons and Scissors.
 Akanksha Agrawal, Sudeshna Kolay, Saket Saurabh and Roohani Sharma.

15:00

Break

15:30 **Session 7A** *Room 1900*

- Minimizing Uncertainty through Sensor Placement with Angle Constraints.
 Ioana Bercea, Volkan Isler and Samir Khuller.
- New Bounds for Facial Nonrepetitive Colouring.
 Prosenjit Bose, Vida Dujmovic, Pat Morin and Lucas Rioux-Maldague.

15:30 **Session 7B** *Room 1700*

- Problems on One Way Road Networks.
 - Jammigumpula Ajaykumar, Avinandan Das, Navaneeta Saikia and Arindam Karmakar.
- Creating a robust implementation for segment intersection by refinement: A
 multistage assignment that defines away degeneracies.

 Jack Snoeyink.

16:10

Conference finishes