Monday, March 14, 2011

09:00-09:30   Janos Pach
Tight Lower Bounds for Epsilon-Nets

09:30-10:00   Joerg-R Sack
Time-Dependent Shortest Paths in Networks

10:00-10:30   Ileana Streinu
Periodic Rigidity

10:30-11:00   Break

11:00-11:30   Joe Mitchell
Recent Progress on Some Covering Tour Problems

11:30-12:00   Tetsuo Asano
Memory-Constrained Algorithms

12:00-02:00   Lunch

02:00-03:00   Micha Sharir
From Joints to Distinct Distances Beyond: The Dawn of an Algebraic Era in Combinatorial Geometry

03:00-04:00   Break

04:00-04:30   Dan Halperin
On Path Quality in Sampling-Based Motion Planning

04:30-05:00   Marc van Kreveld
Median Trajectories

05:00-05:30   Jie Gao
Emergence of Sparse Spanners and Greedy WSPD

05:30-06:00   Esther Ezra
Improved Bound for the Union of Fat Triangles

Tuesday, March 15, 2011

09:00-09:30   Herbert Edelsbrunner
Features and Ghosts in Gaussian Convolution

09:30-10:00   Dominique Attali
Rips Complexes for Shape Reconstruction

10:00-10:30   Ken Clarkson
Sub-linear Optimization for Machine Learning

10:30-11:00   Break

11:00-11:30   Helmut Alt
Parallel Computation of the Depth of an Arrangement of Rectangles

11:30-12:00   Thomas Molhave
Natural Neighbor Interpolation for Grid DEM using GPU

12:00-04:00   Break

04:00-04:30   Sandor Fekete
Exact Solutions and Bounds for General Art Gallery Problems

04:30-05:00   Chee Yap
The Cxyz Algorithm for Isotopic Approximation of Nonsingular Surfaces

05:00-05:30   Carola Wenk
Computing the Frechet Distance between Folded Polygons

08:00-09:00   **Open Problem Session**

Wednesday, March 16, 2011

09:00-09:30   Raimund Seidel
                Can Nearest Neighbor Search be Simple and Always Fast?

09:30-10:00   Otfried Cheong
                A Generalization of Kakeya's Problem

10:00-10:30   Xavier Goaoc
                On Intersection Patterns of Families of Sets

10:30-11:00   Break

11:00-11:30   Christian Knauer
                Point-Separation Problems in High Dimension

11:30-12:00   David Kirkpatrick
                Polygonal Paths of Bounded Curvature

07:30-08:00   Lino Tagliapietra: Glass Magician
                Art Video by Erik Demaine and Martin Demaine

Thursday, March 17, 2011

09:00-09:30   Sylvain Lazard
On the Topology of Plane Algebraic Curves

09:30-10:00   Suresh Venkatasubramanian
Shapely Measures and Measures on Shapes: The Story of the Kernel Distance

10:00-10:30   Emo Welzl
Kasteleyn and the Number of Crossing-Free Matchings and Cycles on a Planar Point Set

10:30-11:00   Break

11:00-11:30   Ke Yi
Beyond Simple Aggregates

11:30-12:00   Bettina Speckmann
Pretty Maps

12:00-02:00   Break

02:00-02:30   Jonathan Shewchuk
Fixed *Points of the Restricted Delaunay Triangulation Operator*

02:30-03:00   Erin Moriarty Wolf Chambers
The Height of a Homotopy

03:00-04:00   Break

04:00-04:30   Shakhar Smorodinsky
List Coloring for Geometric Hypergraphs

04:30-05:00   Erik Demaine
Star Trek Replicators via Staged Self-Assembly

05:00-05:30   Michael Sagraloff
A General Approach to the Analysis of Controlled Perturbation Algorithms

05:30-06:00   Ricky Pollack
Double Permutation: Combinatorial Encodings of Arrangements of Disks

Friday, March 18, 2011

09:00-09:30   Michael Kerber
Algorithms for Persistent Homology

09:30-10:00   Rolf Klein
The VC Dimension of Visibility

10:00-10:30   Olivier Devillers
The Effect of Noise on the Number of Extreme Points

10:30-11:00   Break

11:00-11:30   Nicola Wolpert
Triangular Meshes: Registration and GPU-based Distance Computation

11:30-12:00   Kurt Mehlhorn
The Physarum Computes