



# 22<sup>nd</sup> Fall Workshop on Computational Geometry

Friday, November 9 (Math 3206)	
8:30-9:30	— Check-in & light breakfast —
	<b>1<sup>st</sup> Session</b>
9:30-9:50	Paul Accisano and Alper Üngör, <i>On the Curve/Point Set Matching Problem</i>
9:50-10:10	S. Sankararaman, P. K. Agarwal, T. Mølhave and A. P. Boedihardjo, <i>Identifying Common Portions Between Two Trajectories</i>
10:10-10:30	Jack Snoeyink and Vishal Verma, <i>Transformations to Critical Arcgons: Progress on Tighter Bounds for Delaunay Stretch</i>
10:30-10:50	Jack Snoeyink and Clinton Freeman, <i>A Geometric Workbench for Degree-Driven Algorithm Design</i>
10:50-11:10	— Coffee break (20 minutes) —
	<b>2<sup>nd</sup> Session</b>
11:10-11:30	John Iacono and Kostyantyn Mazur, <i>Tactix on an S-shaped Board</i>
11:30-11:50	Sarah R. Allen and John Iacono, <i>Packing Identical Simple Polygons is NP-hard</i>
11:50-12:10	Rainer Penninger and Ivo Vigan, <i>Point Set Isolation Using Disks is NP-complete</i>
12:10-12:30	Andrew Winslow, <i>Inapproximability of the Smallest Superpolyomino Problem</i>
12:30-2:00	— Lunch —
	<b>3<sup>rd</sup> Session</b>
2:00-2:20	Bahman Kalantari, <i>A Characterization Theorem and an Algorithm for a Convex Hull Problem</i>
2:20-2:40	Michael Biro, Justine Bonanno, Roozbeh Ebrahimi and Lynda Montgomery, <i>Approximation Algorithms for Outlier Removal in Convex Hulls</i>
2:40-3:00	Rezaul Chowdhury, Pramod Ganapathi and Yuan Tang, <i>The Range 1 Query (R1Q) Problem</i>
3:00-3:20	Christopher Vo and Jyh-Ming Lien, <i>Group Following in Monotonic Tracking Regions</i>
3:20-3:40	— Coffee break (20 minutes) —
	<b>4<sup>th</sup> Session</b>
3:40-4:00	Asish Mukhopadhyay, Chris Drouillard and Godfried Toussaint, <i>Guarding Simple Polygons with Semi-open Edge Guards</i>
4:00-4:20	Akitoshi Kawamura and Yusuke Kobayashi, <i>Fence Patrolling by Mobile Agents with Distinct Speeds</i>
4:20-4:40	Michael Biro and Justin Iwerks, <i>Watchman Paths in Disk Grids</i>
4:40-5:00	Jonathan Lenchner and Eli Packer, <i>Visibility Problems Concerning One-Sided Segments</i>
5:00-5:10	— Short break (10 minutes) —
5:10-6:00	<b>Open Problem Session</b>

**Note: Different building, different starting time!**

Saturday, November 10 (CSIC 1115)	
8:00-9:00	— Check-in & light breakfast —
	5 <sup>th</sup> Session
9:00-9:20	Hu Ding and Jinhui Xu, <i>Chromatic Clustering in High Dimensional Space</i>
9:20-9:40	Jeff M. Phillips and Bei Wang, <i>Kernel Distance for Geometric Inference</i>
9:40-10:00	Jiemin Zeng and Jie Gao, <i>A Linear Time Euclidean Spanner on Imprecise Points</i>
10:00-10:20	— Coffee break (20 minutes) —
	6 <sup>th</sup> Session
10:20-10:40	Ning Xu, Peter Braß and Ivo Vigan, <i>An improved Algorithm in Shortest Path Planning for a Tethered Robot</i>
10:40-11:00	Kan Huang, Chien-Chun Ni, Rik Sarkar, Jie Gao and Joseph S. B. Mitchell, <i>Bounded Stretch Homotopic Routing Using Hyperbolic Embedding of Sensor Network</i>
11:00-11:20	J. Li and T. J. Peters, <i>Isotopy Covergence Theorem</i>
11:20-11:30	— Short break (10 minutes) —
	7 <sup>th</sup> Session — Invited Talk
11:30-12:30	William Goldman (University of Maryland) <i>The Experimental Geometry Lab at the University of Maryland</i>
12:30-2:00	— Lunch —
	8 <sup>th</sup> Session
2:00-2:20	Erin W. Chambers, Tao Ju and David Letscher, <i>Medial Residue On a Piecewise Linear Surface</i>
2:20-2:40	Erin W. Chambers, Tao Ju, David Letscher and Lu Liu, <i>Burning the Medial Axes of 3D shapes</i>
2:40-3:00	Gary L. Miller and Donald R. Sheehy, <i>A New Approach to Output-Sensitive Voronoi Diagrams and Delaunay Triangulations</i>
3:00-3:20	Xiaotian Yin, Wei Han, Xianfeng Gu, Shing-Tung Yau, <i>Solving the Cutting Flow Problem for Prismatic Mesh Subdivision</i>
3:20-3:40	— Coffee break (20 minutes) —
	9 <sup>th</sup> Session
3:40-4:00	Adrian Dumitrescu and Csaba D. Tóth, <i>Packing Disks that Touch the Boundary of a Square</i>
4:00-4:20	O. Aichholzer, S. R. Allen, G. Aloupis, L. Barba, P. Bose, J.-L. De Carufel, J. Iacono, S. Langerman and D. L. Souvaine, <i>Sum of Squared Edges for MST of a Point Set in a Unit Square</i>
4:20-4:40	Stefan Langerman, Mudassir Shabbir and William Steiger, <i>Computing Small Hitting Sets for Convex Ranges</i>
4:40-5:00	Boris Aronov, John Iacono, Özgür Özkan and Mark Yagnatinsky, <i>Finding the Thinnest V-shape with Few Outliers</i>
5:00-5:10	— Short break (10 minutes) —
5:10-6:00	Open Problem Follow-up and Closing Remarks