20th European Workshop on Computational Geometry

March 24-26, 2004 Seville, Spain.

23th Tuesday   Registration and welcome reception at Doña Clara Restaurant from 19:00h to 21:00h

24th Wednesday		
8:00-8:45	Registration	
8:45-9:00	Opening	
9:00-10:00	**Some Stamps on Combinatorial Geometry**	**Ferran Hurtado**
10:00-10:15	Short break	
Session 1	10:15-10:30	**A quadratic distance bound on sliding between crossing-free spanning trees**	**O.Aichholzer, K. Reinhardt**
	10:30-10:45	**Curvature criteria to fit curves to discrete data**	**L. Alboul, G. Echeverria, M. Rodrigues**
	10:45-11:00	**Minimum number of different distances defined by a finite number of points**	**A. Albujer, S. Segura Gomis**
	11:00-11:15	**Approximate Distance Oracles for Graphs with Dense Clusters**	**M. Andersson, J. Gudmunsson, C. Levcopoulos**
	11:15-11:30	**A certified conflict locator for the incremental maintenance of the Delaunay graph of semi-algebraic sets**	**F. Anton**
11:15-12:00	Coffee-break	
Session 2	12:00-12:15	**The siphon problem**	**J.M. Díaz-Bañez, C. Seara, I. Ventura**
	12:15-12:30	**Using symmetry evaluation to improve robotic manipulation performance**	**P.Sanz, S. Dabic, R. Marin**
	12:30-12:45	**Two Optimization problems with floodlights**	**A. Spillner**
	12:45-13:00	**Farthest-point queries with geometric and combinatorial constraints**	**O. Daescu, N. Mi, C. Shin, A. Wolff**
13:00-14:30	Lunch	
Session 3	14:30-14:45	**3D realization of two triangulations of a convex polygon**	**S. Bereg**
	14:45-15:00	**Planar embeddability of the vertices of a graph using a fixed point set is NP-hard**	**S. Cabello**
	15:00-15:15	**Finding a widest empty 1-corner corridor**	**J.M. Díaz-Bañez, M.A. López, J.A. Sellarès**
	15:15-15:30	**On geodesic and monophonic convexity**	**C. Hernando, M. Mora, I. Pelayo, C. Seara**
	15:30-15:45	**Space-efficient geometric divide-and-conquer algorithms**	**P. Bose, A. Maheshwari, P. Morin J. Morrison, M. Smid, J. Vahrenhold**
15:45-16:15	Coffee-break	
Session 4	16:15-16:30	**On rectangular cartograms**	**M. van Kreveld, B. Speckmann**
	16:30-16:45	**Maximizing the area of overlap of two unions of disks under rigid motion**	**M. de Berg, S. Cabello, P. Giannopoulos, C. Knauer, R. van Oostrum, R. Veltkamp**
	16:45-17:00	**Minimun weight pseudo-triangulations**	**J. Gudmundsson, C. Levcopoulos**
	17:00-17:15	**Finding planar regions in a terrain**	**S. Funke, T. Malamatos, R. Ray**
	17:15-17:30	**A completion of hypotheses method for 3D-geometry. 3D-extensions of Ceva and Menelaus theorems**	**E. Roanes-Macías, E. Roanes-Lozano**
17:30-18:15	Bussiness meeting	

		25th Thursday	
Session 5	8:45-9:00	**On relative isodiametric inequalities**	**A. Cerdán, C. Miori, S. Segura Gomis**
	9:00-9:15	**Smoothed number of extreme points under uniform noise**	**V. Damerow, C. Sohler**
	9:15-9:30	**Optimal spanners for axis-aligned rectangles**	**T. Asano, M. de Berg, O. Cheong, H. Everett, H. Haverkort, N. Katoh, A. Wolff**
	9:30-9:45	**Point set stratification and minimum weight structures**	**M. Abellanas, M. Claverol, F. Hurtado**
9:45:10:00		Short break	
Session 6	10:00-10:15	**Optimizing a 2D function satisfying unimodality properties**	**E. Demaine, S. Langerman**
	10:15-10:30	**Computing the convex hull of disks using only their chirotope**	**L. Habert, M. Pocchiola**
	10:30-10:45	**Similarity search in semialgebraic pattern spaces**	**C. Knauer**
	10:45-11:00	**On the number of pseudo-triangulations of certain point sets**	**O. Aichholzer, D. Orden, F. Santos, B. Speckmann**
11:00-11:30		Coffee-break	
Session 7	11:30-11:45	**Geometric dilation of closed planar curves: A new lower bound**	**A. Ebbers-Baumann, A. Grüne, R. Klein**
	11:45-12:00	**Competitive search ratio of graphs and poligons**	**R. Fleischer, T. Kamphans, R. Klein, E. Langetepe**
	12:00-12:15	**Pointed encompassing trees**	**M. Hoffmann, B. Sechmann, C. Tóth**
	12:15-12:30	**Lower bounds for the polygon exploration problem**	**R. Hagius, C. Icking, E. Langetepe**
	12:30-12:45	**Geometric data structures for multihierarchical XML tagging of manuscripts**	**J. Jaromczyk, N. Moore**
	12:45-13:00	**Finding a door along a wall with an error afflicted robot**	**T. Kamphans, E. Langetepe**
13:00-14:30		Lunch	
Session 8	14:30-14:45	**Computing the Fréchet distance between piecewise smooth curves**	**G. Rote**
	14:45-15:00	**On fencing problems**	**C. Miori, C. Peri, S. Segura Gomis**
	15:00-15:15	**Region inter-visibility in terrains**	**M. van Kreveld, E. Moet, R. van Oostrum**
	15:15-15:30	**Balanced intervals of two stes of points on a line or circle**	**A. Kaneko, M. Kano**
	15:30-15:45	**On geometric properties of enumerations of axis-parallel rectangles**	**K. Vyatkina**
15:45-16:15		Coffee-break	
16:15-17:15		**Combinatorial Geometry for TV Audiences**	**Jin Akiyama**
19:00		Visit to "Real Alcazar" and dinner	

26th Friday			
Session 9	9:15-9:30	**Guarding art galleries by guarding witnesses**	**K. Chawa, B. Jo, C. Knauer, E. Moet, R. van Oostrum, C. Shin**
	9:30-9:45	**Verification of partitions of 2D and 3D objets**	**L. Palios**
	9:45-10:00	**New lower bounds for the number of straight-edge triangulations of a planar point set**	**P. McCabe, R. Seidel**
	10:00-10:15	**A simple and less slow method for counting triangulations and for related problems**	**S. Ray, R. Seidel**
10:15-10:30		Short Break	
Session 10	10:30-10:45	**Approximate Range searching using binary space partitions**	**M. de Berg, M. Streppel**
	10:45-11:00	**Straight line skeleton in linear time, topologically equivalent to the medial axis**	**M. Tanase, R. Veltkamp**
	11:00-11:15	**Quadratic-time, linear-space algorithms for generating orthogonal polygons with a given number of vertices**	**A. Tomas, A. Bajuelos**
	11:15-11:30	**Partitioning orthogonal polygons by extension of all edges incident to reflex vertices: lower and upper bounds on the number of pieces**	**A. Bajuelos, A. Tomás, F. Marques**
11:30-12:00		Coffee-break	
12:00-13:00		**Structure in Visibility Graphs**	**David Rappaport**
13:00-14:30		Lunch	
Session 11	14:30-14:45	**Defining discrete Morse functions on infinite surfaces**	**R. Ayala, L. Fernandez, J. Vilches**
	14:45-15:00	**Warping cubes: better triangles from marching cubes**	**L. Tzeng**
	15:00-15:15	**Maximum weight triangulation of a special convex polygon**	**J. Qian, C. Wang**
	15:15-15:30	**The minimum Manhattan network problem approximations and exact solutions**	**M. Benkert, T. Shirabe, A. Wolff**
	15:30-15:45	**New bound for incremental constructing arrangements of curves**	**M. Abellanas, A. Calatayud, J. García-López**
15:45-16:15		Coffee-break	
Session 12	16:15-16:30	**Improved results for the k-centrum straight-line location problem**	**A. Lozano, J. Mesa, F. Plastria**
	16:30-16:45	**Triangulations without pointed spanning trees**	**O. Aichholzer, C. Huemer, H. Krasser**
	16:45-17:00	**Distributed ranking methods for geographic information retrieval**	**M. van Kreveld, I. Reinbacher, A. Arampatzis, R. van Zwol**
	17:00-17:15	**Unfolding simple chains inside circles**	**M. Eskandari, A. Mohades**
	17:15-17:30	**Computing the Hausdorff distance between curved objets**	**H. Alt, L. Scharf**
17:45		Farewell	