

Session 6: Thurs 2.30PM – 4.05PM

Session Chair: Roberto Tamassia

- A. Marcus, G. Tardos – *Intersection Reverse Sequences and Geometric Applications.*
- J. Kyncl, J. Pach, G. Toth – *Long Alternating Paths in Bicolored Point Sets.*
- S. Norine – *Drawing Pfaffian Graphs.*
- M. Newton, O. Sykora, M. Uzovic, I. Vrto – *New Exact Results and Bounds for Bipartite Crossing Numbers of Meshes.*
- J. Balogh, G. Salazar – *Improved Bounds for the Number of k -sets, Convex Quadrilaterals, and the Rectilinear Crossing Number of K_n .*

Session 7: Thurs 4.35PM – 6.00PM

Session Chair: Stephen Kobourov

- P. F. Cortese, G. Di Battista, M. Patrignani, M. Pizzonia – *Clustering Cycles into Cycles of Clusters.*
- M. Baur, U. Brandes, M. Gaertler, D. Wagner – *Drawing the AS Graph in Two and a Half Dimensions.*
- S. Basu, R. Dhandapani, R. Pollack – *On the Realizable Weaving Patterns of Polynomial Curves in R^3 .*
- E. Di Giacomo, W. Didimo, G. Liotta, M. Suderman – *Hamiltonian-with-Handles Graphs and the k -Spine Drawability Problem.*
- R. Ellis, X. Jia, J. Martin, C. Y – *Random Geometric Graph Diameter in the Unit Disk with L_p Metric.*

Session 8: Fri 9.00AM – 10.40AM

Session Chair: Hubert de Fraysseix

- C. Papamanthou, I. Tollis, M. Do – *3D Visualization of Semantic Metadata Models and Ontologies.*
- M. Bekos, M. Kaufmann, A. Symvonis, A. Wolff – *Boundary Labeling: Models and Efficient Algorithms for Rectangular Maps.*
- C. Goerg, P. Birke, M. Pohl, S. Diehl – *Dynamic Graph Drawing of Sequences of Orthogonal and Hierarchical Graphs.*
- U. Brandes, C. Pich – *GraphML Transformation.*
- S. Hachul, M. Junger – *Drawing Large Graphs with a Potential Field Based Multilevel Algorithm.*

Session 9: Fri 11.10AM – 12.20PM

Session Chair: Giuseppe Liotta

- C. Erten, S. Kobourov – *Simultaneous Embedding of Planar Graphs with Few Bends.*

- A. Por, D. Wood – *No-Three-in-Line in 3D.*
- S. Aziza, T. Biedl – *Hexagonal Grid Drawings: Algorithms and Lower Bounds.*
- M. Patrignani – *A Note on the Self-Similarity of Some Orthogonal Drawings.*

Session 10: Fri 2.15PM – 4.40PM

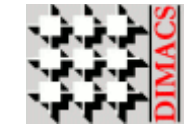
Session Chair: Arian Rusu

- B. Finkel, R. Tamassia – *Curvilinear Graph Drawing Using the Force-Directed Method.*
- D. Forrester, S. Kobourov, A. Navabi, K. Wampler, G. Yee – *Graphael: A System for Generalized Force-Directed Layouts.*
- S. Kobourov, C. Pitta – *An Interactive Multi-User System for Simultaneous Graph Drawing.*
- S. Hong, T. Murtagh – *Visualization of Large and Complex Networks Using PolyPlane.*
- S. Kobourov, R. Yusufov – *Visualizing Large Graphs with Compound-Fisheye Views and Treemaps.*
- P. Holleis, F. Brandenburg – *QUOGGLES: Query On Graphs - a Graphical Largely Extensible System.*
- U. Dogrusoz, E. Giral, A. Cetintas, A. Civril, E. Demir – *A Compound Graph Layout Algorithm for Biological Pathways.*
- S. Hong, D. Merrick, H. Nascimento – *The Metro Map Layout Problem.*

12th International Symposium on Graph Drawing in the Heart of Harlem, NYC

September 29 – October 2, 2004

1st floor of Steinman Hall, City College,
at the corner of 140th Street and Convent Avenue



Conference Program

Tuesday, September 28

4.00PM – 7.00PM:

- Registration and Reception

Wednesday, September 29

8.30AM – 9.30AM:

- Registration and Refreshments

9.30AM – 9.45AM:

- Opening Remarks: Gregory H. Williams, President of City College, CUNY

9.45AM – 10.40AM:

- Invited Lecture: Paul Seymour

10.40AM – 11.00AM:

- Coffee Break

11.00AM – 12.35PM:

- **City College Session (Session 1)**

12.35PM – 2.10PM:

- Lunch

2.30PM – 4.05PM:

- Session 2

4.05PM – 4.35PM:

- Coffee Break

4.35PM – 6.10PM:

- Session 3

6.30PM – 8.00PM:

- Graph Drawing Contest

Thursday, September 30

9.00AM – 10.40AM:

- **University of North Texas Session (Session 4)**

10.40AM – 11.10AM:

- Coffee Break

11.10AM – 12.30PM:

- Session 5

12.30PM – 2.00PM:

- Lunch

2.30PM – 4.05PM:

- Session 6

4.05PM – 4.35PM:

- Coffee Break

4.35PM – 6.00PM:

- Session 7

6.30PM – 9.45PM:

- Conference Banquet and Graph Drawing Contest Results

Friday, October 1

9.00AM – 10.40AM:

- Session 8

10.40AM – 11.10AM:

- Coffee Break

11.10AM – 12.20PM:

- Session 9

12.20PM – 2.00PM:

- Lunch

2.15PM – 4.40PM:

- Session 10

Saturday, October 2

9.30AM – 10.00AM:

- Poster Session

10.00AM – 10.50AM:

- Invited Lecture: Erik Demaine

10.50AM – 12.15AM:

- Invitation to GD2005, Closing Remarks and Brunch

12.15PM –

- Excursion(s)

Invited Lecture Listing

Erik Demaine (M.I.T)

Saturday, October 2: 10.00AM – 10.50AM

- Fast Algorithm for Hard Graph Problems: Bidimensionality, Minors, and Local Treewidth.

Paul Seymour (Princeton University)

Wednesday, September 29: 9.45AM – 10.40AM

- The Structure of Claw-Free Graphs.

Detailed Lecture Listing

City College Session (Session 1): Wed 11.00AM – 12.35PM

Session Chair: Janos Pach

- N. Bonichon, S. Felsner, M. Mosbah – *Convex Drawings of 3-connected Plane Graphs.*
- P. Healy, K. Lynch – *Building Blocks of Upward Planar Diagraphs.*
- G. Aloupis, P. Bose, P. Morin – *Reconfiguring Triangulations with Edge Flips and Point Moves.*
- P. Bose, F. Hurtado, E. Rivera-Campo, D. Wood – *Partitions of Complete Geometric Graphs into Plane Trees.*
- H. Zhang, X. He – *New Theoretical Bounds of Visibility Representation of Plane Graph.*

Session 2: Wed 2.30PM – 4.05PM

Session Chair: Franz-J. Brandenburg

- R. Anderson, F. Chung, L. Lu – *Drawing Power Law Graphs.*
- D. Eppstein – *Algorithms for Drawing Media.*
- C. Gotsman, Y. Koren – *Distributed Graph Layout for Sensor Networks.*
- M. Raither – *Visual Navigation of Compound Graph.*
- E. Gansner, Y. Koren, S. North – *Graph Drawing by Stress Majorization.*

Session 3: Wed 4.35PM – 6.10PM

Session Chair: Emden Gansner

- S. Hong, P. Eades – *A Linear Time Algorithm for Constructing Maximally Symmetric Straight Line Drawings of Planar Graphs.*
- D. Ebner, G. Klau, R. Weiskircher – *Label Number Maximization in the Slider Model.*
- M. Eiglsperger, M. Siebenhaller, M. Kaufmann – *An Efficient Implementation of Sugiyama's Algorithm for Layered Graph Drawing.*
- M. Forster – *A Fast and Simple Heuristic for Constrained Two-Level Crossing Reduction.*
- J. Boyer – *Additional PC-tree Planarity Conditions.*

University of North Texas Session (Session 4): Thurs 9.00AM – 10.40AM

Session Chair: Farhad Shahrokhi

- V. Dujmovic, D. Wood – *Layouts of Graph Subdivisions.*
- L. Torok, I. Vrto – *Layout Volumes of the Hypercube.*
- V. Dujmovic, M. Suderman, D. Wood – *Really Straight Graph Drawings.*
- D. Eppstein, M. Goodrich, J. Meng – *Confluent Layered Drawings.*
- P. Hui, M. Schaefer, D. Stefankovic – *Train Tracks and Confluent Drawings.*

Session 5: Thurs 11.10AM – 12.30PM

Session Chair: Ondrej Sykora

- A. Dean, E. Gethner, J. Hutchinson – *Unit Bar-Visibility Layouts of Triangulated Polygons.*
- H. de Fraysseix, P. Ossona de Mendez – *Contact and Intersection Representations.*
- E. Di Giacomo, W. Didimo, G. Liotta, H. Meijer – *Computing Radial Drawings on the Minimum Number of Circles.*
- M. Kitching, S. Whitesides – *The Three Dimensional Logic Engine.*