Kristina Vušković, Ph.D.

Department of Mathematics
University of Kentucky
Lexington, KY 40506
Telephone: (606) 257-4090
Fax: (606) 257-4078
email: kristina@ms.uky.edu

Date of Birth: May 6, 1967
Citizenship: U.S.

Academic Appointments:

Assistant Professor of Mathematics, University of Kentucky, Department of Mathematics, August 1996 - present.

Postdoctoral Fellow, University of Waterloo, Department of Combinatorics and Optimization, August 1994 - August 1996.

Education:

1994	Ph.D.	Algorithms, Combinatorics and Optimization, Carnegie Mellon University Thesis Director: Gérard Cornuéjols
1989	B.A.	Mathematics/Computer Science (Summa Cum Laude), Courant Institute, New York University

Awards:

NSERC Canada International Fellowship, 1994-96.

Sidney G. Roth Memorial Prize (for excellence in mathematics),
New York University, 1989.

Sherborne V. Damerel Memorial Award (for academic excellence),
New York University, 1989.

Mathematics Award, New York University, 1988.

Teaching and Other Experience:

Fall 1997	Calculus II, University of Kentucky
Spring 1997	Calculus I, University of Kentucky
Fall 1996	Calculus III, University of Kentucky
	Graph Theory, Doctoral, University of Kentucky
1989 – 1994	Teaching Assistant, Dept. of Mathematics, Carnegie Mellon University
Summer 1990, 1992, 1994	Lecturer, Intro. to Modern Mathematics, Carnegie Mellon University
Fall 1992	Organizer of Algorithms, Combinatorics and Optimization Seminar, Carnegie Mellon University
1988/1989	Conducted tutorial center, New York University

Papers:

Refereed Publications

[1] *Balanced Matrices: A Survey*, M. Conforti, G. Cornuéjols, A. Kapoor, M. R. Rao, K. Vušković, *Proceedings of the Fifteenth International Symposium on Mathematical Programming*, University of Michigan Press (1994) 1-33.

[2] *Recognizing Blanced 0,+1,-1 Matrices*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, *Proceedings of the Fifth Annual ACM-SIAM Symposium on Discrete Algorithms*, Arlington, Virginia (1994) 103-111.

[3] *A Mickey-Mouse Decomposition Theorem*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, *Proceedings of the Fourth International Integer Programming and Combinatorial Optimization Conference*, Balas and Clausen eds. Springer Verlag (1995) 321-328.

[4] *Perfect Matchings in Balanced Hypergraphs*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, *Combinatorica* 16 (1996) 325-329.

[5] *Universally Signable Graphs*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, *Combinatorica* 17 (1997) 67-77.

[6] *Perfect, Ideal and Balanced Matrices: A Survey*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, *Ricerca Operativa* vol. 26 n. 80 (1997) 65-80.

[7] *Perfect, Ideal and Balanced Matrices*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, a chapter in *Annotated Bibliographies in Combinatorial Optimization* edited by M. Dell'Amico, F. Maffioli and S. Martelo; John Wiley and Sons, Ltd. (1997).

[8] *Finding an Even Hole in a Graph*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, *Proceedings of the* 38^{th} *Annual Conference on Foundations of Computer Science*, Miami Beach, Florida (1997) 480-485.

[9] *Balanced 0,+1,-1 Matrices, Part I: Decomposition*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, preprint, Carnegie Mellon University (1993), to appear in *Journal of Combinatorial Theory B*.

[10] *Balanced 0,+1,-1 Matrices, Part II: Recognition Algorithm*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, preprint, Carnegie Mellon University (1993), to appear in *Journal of Combinatorial Theory B*.

Submitted to Refereed Journals

[11] *Even and Odd Holes in Cap-Free Graphs*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, preprint (1995), submitted to *Journal of Graph Theory*.

[12] *Triangle-Free Graphs That are Signable Without Even Holes*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, preprint (1996), submitted to *Journal of Graph Theory*.

[13] *A Class of β-Perfect Graphs*, C. M. H. de Figueiredo, K. Vušković, *Estudos e Comunicações do Instituto de Matemática 62*, Universidade Federal do Rio de Janeiro (1996), submitted to *Journal of Combinatorial Theory B*.

[14] *Balanced Cycles and Holes in Bipartite Graphs*, M. Conforti, G. Cornuéjols, K. Vušković, preprint, University of Kentucky (1997), submitted to *Discrete Mathematics* and *IMAG*, University of Grenoble.

[15] *Even-Hole-Free Graphs, Part I: Decomposition*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, preprint (1997), submitted to *Journal of Graph Theory*.

[16] *Even-Hole-Free Graphs, Part II: Recognition Algorithm*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, preprint (1997), submitted to *Journal of Graph Theory*.

In Preparation

[17] *Study of a Smallest Odd Hole*, M. Conforti, G. Cornuéjols, A. Kapoor, K. Vušković, preprint, Carnegie Mellon University (1994).

Lectures:

Invited Speaker, Bellairs Workshop on Combinatorial Optimization, Holetown, Barbados, March 1993.

Invited Speaker, DIMACS Workshop on Perfect Graphs, Princeton, New Jersey, June 1993.

Seminar Speaker, University of Waterloo, Waterloo, Canada, November 1993.

Speaker, Fifth Annual ACM-SIAM Symposium on Discrete Algorithms, Arlington, Virginia, Jan 1994.

Seminar Speaker, University of Pisa, Pisa, Italy, March 1994.

Speaker, Fourth International Integer Programming and Combinatorial Optimization Conference, Copenhagen, Denmark, May 1995.

Seminar Speaker, Old Dominion University, Norfolk, Virginia, September 1995.

Seminar Speaker, University of Belgrade, Belgrade, Yugoslavia, November 1995.

Speaker, Twenty-Seventh Southeastern International Conference on Combinatorics, Graph Theory and Computing, Baton Rouge, Louisiana, February 1996.

Seminar Speaker, University of Toronto, Toronto, Canada, February 1996.

Seminar Speaker, Western Michigan University, Kalamazoo, Michigan, March 1996.

Seminar Speaker, University of Kentucky, Lexington, Kentucky, March 1996.

Speaker, Combinatorics Day, University of Kentucky, Lexington, Kentucky, October 1996.

Speaker, The 38^{th} Annual Conference on Foundations of Computer Science, Miami Beach, Florida, October 1997.

Seminar Speaker, University of Louisville, Louisville, Kentucky, November 1997.

References:

Prof. Michele Conforti
Dipartimento di Matematica Pura ed Applicata
Universita di Padova
Via Belzoni 7
35131 Padova, Italy
(39-49) 831-980
conforti@hilbert.math.unipd.it

Prof. Gérard Cornuéjols
Graduate School of Industrial Administration
Carnegie Mellon University
Pittsburgh, PA 15213
(412) 268-2284
gc0v@andrew.cmu.edu

Dr. Ir. A.M.H. Gerards
CWI
Postbus 94079
1090 GB Amsterdam
The Netherlands
+31-205924045
bgerards@cwi.nl

Teaching:

Dr. Russell Walker
Department of Mathematics
Carnegie Mellon University
Pittsburgh, Pa 15213
(412) 268-2545
rw1k@andrew.cmu.edu