

R.I.T.

Chester F. Carlson

College of Science

Center for **IMAGING** SCIENCE

Seminar Series

The Unicorn Tapestries and Mathematical Approaches to Imaging

David and Gregory Chudnovsky

*Directors, Institute for Mathematics and Advanced Supercomputers
Polytechnic Univ.*



4pm, Wed., April 9, 2008

Auditorium of the Center for Imaging Science

Large Scale Scientific Visualization continues to challenge both the scientific research and exiting computational resources. Computational parallelism is an important component of this enterprise. The talk will describe two examples of speakers personal experience with the large scale visualization projects, one of which was a “hunt for the unicorn”, and another is VLSI and supercomputer design.

www.cis.rit.edu/seminar

for up-to-date seminar schedule, video archives and abstracts.

Speakers Bios

Chudnovsky, David V.

Education:

Kiev State University, 1964-1969, Diploma in Mathematics (mention "summa cum laude").
Post graduate fellow, Inst. of Mathematics, Ukrainian Acad. of Sc., Kiev, 1969-1972. 1972, Ph.D.

Positions held:

Distinguished Industry Prof. of Mathematics, Dept. of Mathematics, Polytechnic University
Director, Institute for Mathematics and Advanced Supercomputing (IMAS), Brooklyn, NY, 1997-.
Sr. Research Scientist in the Dept. of Mathematics, Columbia University, New York, 1978-1996.
Charge de Recherche, Centre National de la Recherche Scientifique, Paris, 1981.
Visit. Prof., Serv. de Phys. Theorique, Cntr. Nuclear Energy-Saclay, Gif-sur-Yvette, Fr., 1979-80.
Research Fellow, Centre de Mathematiques, Ecole Polytechnique, 1977-1978.
Research Fellow and Sr. Research Fellow, Inst. of Mechanics, Ukrainian Acad. of Sc., 1969-1976.

Fields of Scientific Interest:

Theoretical Mathematics: Number Theory, partial differential equations, Hamiltonian systems.
Mathematical Physics: Field theories, quantum systems. EE and Computer Science: Computer algebra and complexity, Large Scale Numerical Mathematics, Parallel Computing and DSP, VLSI and Physical Design, Supercomputer Design.

Awards and Honors:

John Simon Guggenheim Fellowship, 1980.

Co-Chairman

(with D. V. Chudnovsky, H. Cohn, M. B. Nathanson) of NY Number Theory Seminar: 1981-

Publications:

118 published papers authored and 15 books authored or edited.

Chudnovsky, Gregory V.

Education:

Kiev State University, 1969-1974, Diploma in Mathematics (mention "summa cum laude").
Institute of Mathematics, Ukrainian Academy of Sciences, Kiev, June 1975, Ph.D.

Positions held:

Distinguished Industry Professor of Mathematics, Dept. of Mathematics, Polytechnic University;
Director, Institute for Mathematics and Advanced Supercomputing (IMAS), Brooklyn, NY, 1997-.
Sr. Research Scientist in the Dept. of Mathematics, Columbia University, New York, 1978-1996.
Maitre de Recherche, Centre National de la Recherche Scientifique, Paris, 1979-1981.
Maitre de Conference, University of Paris VI, 1977-1978.
Visiting Professor, Institute des Hautes Etudes Scientifiques, Bures-sur-Yvette, Fr., 1977-1978.
Research Fellow, Kiev State University, 1974-1976.

Fields of Scientific Interest:

Number Theory: Analytic number theory, Diophantine approximations and transcendence theory.
Mathematical Physics: Non-linear equations, quantum and classical field theories. EE and Computer Science: Computer algebra and complexity, Large Scale Numerical Mathematics, Parallel Computing and DSP, VLSI and Physical Design, Supercomputer Design.

Awards and Honors:

Prize of the Moscow Mathematical Society, 1970.
Prix Peccot-Vimont, 1979, France,
John Simon Guggenheim Fellowship, 1980.
Doctor of Science honoris causa, Bard College, New York, 1981.
MacArthur Prize Fellowship, 1981-1986,
George Polya Memorial Prize, SIAM, 1994.

Co-Chairman

(with D. V. Chudnovsky, H. Cohn, M. B. Nathanson) of NY Number Theory Seminar: 1981-

Publications:

136 published papers authored and 14 books authored or edited.