

International Conference on Polynomial System Solving

November 24-25-26, 2004 Université Pierre et Marie Curie, Paris, France

in honor of **Daniel Lazard**

<http://www-calfor.lip6.fr/ICPSS>

Daniel Lazard, Professor of Computer Science at Université Pierre et Marie Curie, Paris 6, will retire at the end of the year 2004. This conference will be held in honor of his many major contributions to computer algebra, polynomial system solving, and applications. The program will consist of invited talks and contributed presentations.

Scope: Since the meeting is held in honor of Lazard's achievements, we solicit research papers on topics related to Lazard's works and interests, for instance: Algebraic resolution of polynomial systems, Gröbner bases, triangular sets, algebraic representation of solutions, specifications of polynomial system solvers, practical and theoretical improvements, efficient implementations, complexity, effective differential algebra. Quantifier elimination and real solutions of polynomial systems. Algorithms for studying real solutions of polynomial systems in many senses (number, topological invariants, ...), improvements of cylindrical algebraic decomposition (CAD). Effective Galois theory: Techniques improving the resolution of polynomial systems using symmetries, computations in the field of effective Galois theory. Applications: Resolution of polynomial systems arising in applications using symbolic/numeric techniques: robotics, signal theory, cryptography, statistics.

Publication: Accepted contributed papers (extended abstracts) will be published in the proceedings that will be available at the meeting. After the meeting the extended versions of the contributed papers will be published in a special issue of the Journal of Symbolic Computation after a standard journal refereeing procedure.

Invited Speakers:

B. Buchberger (RISC-Linz, Austria)
 J. Calmet (Universität Karlsruhe, Germany)
 J. Davenport (Bath University, UK)
 H. Hong (NCSU, USA)
 M.-F. Roy (Université de Rennes 1, France)
 C. Traverso (Università di Pisa, Italy)

Program Committee:

A. Valibouze, Chair, France
 D. Augot, France
 C. Brown, USA
 X.-S. Gao, China
 H. Hong, USA
 E. Hubert, France
 I. Kotsireas, Canada
 B. Mourrain, France
 E. Schost, France
 A. Steel, Australia
 B. Sturmfels, USA
 K. Yokoyama, Japan

Local Organizers: The conference is organized by the Computer Algebra Team (CALFOR) of LIP6 (Université Pierre et Marie Curie) and the SALSA INRIA project.

Sponsors: (1) INRIA Rocquencourt, France (2) LIP6, Université Paris 6, France (3) Wilfrid Laurier University, Canada (4) RAAG (Real Algebraic and Analytic Geometry) European Network

