

ANNOUNCEMENTS

EUROPEAN CONFERENCE ON COMPUTER ALGEBRA — SYMBOLIC AND ALGEBRAIC COMPUTATION (EUROCAL '85)

April 1-3, 1985, Linz, Austria

Organized by:

SAME (Organization for Symbolic and Algebraic Manipulation in Europe
with cooperation of
ACM SIGSAM (Special Interest Group on Symbolic and Algebraic Manipulation)).

Topics and Special Emphasis:

In addition to covering the traditional topics of computer algebra, for instance,

- simplification of algebraic and transcendental terms,
- symbolic integration, summation, lines computations etc.,
- symbolic solution of differential equations,
- exact computation of zeros of algebraic systems,
- decision algorithms for algebraic theories,
- arithmetic in basic and extended algebraic domains,
- factorization,
- computational number, group and ring theory,
- complexity of algebraic algorithms and data structures,
- languages and software systems for computer algebra,
- applications of computer algebra in physics,
- tutorial aspects of computer algebra and use of computer algebra systems in mathematical education.

A special emphasis of EUROCAL '85 will be on the interaction of computer algebra with related areas, for example:

- manipulation of abstract data type specifications,
- unification algorithms and solution of term equations,
- computer-aided program verification, program synthesis and program transformation,
- evaluation algorithms for logic programming, rewrite rule programming, and functional programming,
- symbolic execution of programs,
- automated theorem proving in special theories,

- algorithmic geometry and computer graphics,
- algorithmic combinatorics,
- parallel algorithms for symbolic computation,
- parallel and VLSI hardware for symbolic computation,
- probabilistic algorithms for symbolic computation,
- exact computations in the rationals, interval arithmetic and relations to algebraic computation,
- integration of numerical and symbolic computation,
- integration of computer algebra systems into larger systems, expert systems, work stations etc.,
- integration of new software technological methods into computer algebra systems (kernel systems, parametric data types, distributed computation etc.),
- pure algebra (algebraic geometry, non-associative algebra, constructive category theory etc.),
- new applications of symbolic and algebraic algorithms and software systems in fields other than physics, for example, in systems theory, coding theory, cryptography, chemistry, mechanics, CAD, artificial intelligence, etc.

Awards:

Best paper award; best demo award.

Program:

The program will include a tutorial lecture on symbolic and algebraic computation for newcomers and tutorial demonstration of some of the most advanced computer algebra software systems as well as a few invited lectures on recent research topics.

Social Program:

Sunday, March 30, 1985: guided tour to Salzburg.

Thursday, April 4, 1985: guided tour to Vienna.

Program Chairman:

Bruno Buchberger, Universität Linz, Institut für Mathematik

A 4040 LINZ (Austria, Europe)

Tel. 0043(732)232381-9219, Telex 2-2323 uni li a

Program Committee:

A. Balaban (Bukarest, Rumania), W. Bibel (München, FRG), A. Borodin (Toronto, Canada), N. Bose (Pittsburgh, USA), G. Collins (Madison, USA), J. Davenport (Bath, UK), R. Fateman (Berkeley, USA; SIGSAM Chairman), I. Frick (Stockholm, Sweden), G. Huet (Le Chesnay, France), E. Krishnamurthy (Bangalore, India), U. Kulisch (Karlsruhe, FRG), W. Lassner (Leipzig, GRD), T. Legendi (Szeged, Hungary), A.K. Lenstra (Amsterdam, The Netherlands), H. Leopoldt (Karlsruhe, FRG), R. Llopis

de Trias (Caracas, Venezuela), R. Loos (Karlsruhe, FRG), H. Lüneberg (Kaiserslautern, FRG), Z. Manna (Stanford, USA), R. Nakajima (Kyoto, Japan), J. Neubüser (Aachen, FRG), J. Nievergelt (Zürich, Switzerland), L. Robbiano (Genova, Italy), H. van Hulzen (Enschede, The Netherlands; SAME Chairman), H. Zimmer (Saarbrücken, FRG).

Local Arrangements:

B. Kutzler, F. Lichtenberger, F. Winkler (Linz).

Demo Coordination:

H. van Hulzen (Enschede), H. Gruber (Linz).

**SIXTH EUROPEAN WORKSHOP ON
APPLICATIONS AND THEORY OF PETRI NETS**

June 26–28, 1985, Espoo, Finland

The *Sixth Annual European Petri Net Meeting* will be organized by the Digital Systems Laboratory of Helsinki University of Technology. Papers presenting original contributions in any area of application or theory of Petri nets are sought.

Topics (not meant to be an exclusive list):

- Net based system models,
- Graphical representation of systems,
- Interpretations of nets,
- Analysis of structure and behaviour of nets,
- Net based tools,
- Applications: Programming languages, Protocols and interfaces, Hardware structures,
- Realtime systems, Office automation,
- Educational issues.

Under the Auspices of:

AFCET SIG 'Systèmes Parallèles et Distribués' and CNRS-C³, AICA, BCS SIG 'Formal Aspects of Computing Science', EATCS, GI SIG 'Petri Nets and Related System Models'.

Papers:

Authors are invited to submit 11 copies of a full draft paper or an extended abstract (approx. 10 pages) clearly stating the aim of the work, its relation to existing work,

the main results, and their future implications. The copies should be received no later than **January 15, 1985** by the Chairman of the program committee:

Kurt Jensen
 Computer Science Department
 Aarhus University
 Ny Munkegade
 DK-8000 Aarhus C
 Denmark

Authors will be notified of acceptance/rejection by April 1, 1985. Final papers are due May 15, 1985. The language of the workshop is English.

Program Committee:

K. Jensen (Aarhus)
 G. Lanzarone (Milan)
 A. Mazurkiewicz (Warsaw)
 G. Memmi (Paris)
 L. Ojala (Helsinki)
 W. Reisig (Bonn)
 G. Rozenberg (Leiden)
 R. Valette (Toulouse)
 R. Valk (Hamburg)
 G. Winskel (Cambridge)

Local Arrangements:

Leo Ojala and Markus Lindqvist
 Digital Systems Laboratory
 Helsinki University of Technology
 Otakaari 5 A
 SF-02150 Espoo
 Finland
 Phone +358 0 4512878
 Telex 125161 htkk sf

The workshop will take place at the Helsinki University of Technology.

Further Information:

For further information, contact Leo Ojala or Kurt Jensen.

**LOGIC COLLOQUIUM '85—EUROPEAN SUMMER MEETING
 OF THE ASSOCIATION FOR SYMBOLIC LOGIC**

July 7–13, 1985, Paris, France

The Symposium is organized by the Logic Group of the University of Paris VII, U.A. 753 of the Centre National de la Recherche Scientifique. It will be held from July 7 to July 13, 1985 in facilities provided by the Department of Mathematics of the University of Paris XI, at Orsay (30 minutes from the center of Paris).

The main topics will be:

- (1) Model Theory and Proof Theory.
- (2) Computer Science in relation to Logic.
- (3) Philosophy in relation to Logic.

Contributed papers (one page maximum) should be submitted by **April 1, 1985**.

Accommodation will be available at the attractive Cité Universitaire on the Orsay campus grounds. The price of full board will not exceed 120 FF per day (about £10 or £15 at current exchange rates).

Program Committee: K.R. Apt, J. Bouveresse, S. Feferman, H. Gaifman, J.Y. Girard, W. Hodges, J.L. Krivine, D. Lascar, K. McAloon, M. Nivat, G. Sabbagh.

Organizing Committee: M. Dickmann, J.L. Krivine, D. Lascar, M. Parigot, E. Pelz, Y. Rav, J.P. Ressayre, G. Rugglu, G. Sabbagh.

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 Université Paris VII
 2, Place Jussieu
 75252 PARIS Cedex 05—France

FIFTH INTERNATIONAL CONFERENCE ON FUNDAMENTALS OF COMPUTATION THEORY (FCT '85)

September 9–13, 1985, Berlin, GDR

The *Fifth International Conference on Fundamentals of Computation* is organized from September 9 to 13, 1985 by the Humboldt University of Berlin. The Conference is the fifth from the series of FCT Conferences organized every odd year. The papers selected by the Program Committee are expected to fall into the following four categories:

- Theory of Machines, Computations, and Languages,
- Algebraic, Arithmetical, and Combinatorial Methods in Computation Theory,
- Efficient Algorithms, Computational Geometry,
- Computability, Complexity.

The Scientific Program will include invited lectures and submitted papers.

Conference Chairman:

Lothar Budach

Program Committee:

K.R. Apt, J. Berstel, E. Börger, M. Broy, L. Budach, R.G. Bukharajev,
 P. van Emde Boas, F. Gecseg, J. Gruska, M.A. Harrison, J. Hartmanis,
 G. Hotz, K. Indermark, M. Karpinski, D. Kozen, J. van Leeuwen, O.B.
 Lupanov, B. Nordström, Z. Pawlak, A. Pultr, A. Salomaa, J.W. Thatcher,
 H. Thiele.

Instructions for Authors:

Authors are invited to submit 5 copies of a draft paper to the Conference Chairman	by January 25, 1985
They will be notified of acceptance or rejection	by April 12, 1985
Deadline for final text	May 24, 1985

Location:

Engineering High School of Cottbus

For more information:

FCT '85
 Sektion Mathematik
 Humboldt Universität zu Berlin
 DDR-1086 Berlin
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