



## EUROCAL '85

EUROPEAN CONFERENCE ON COMPUTER ALGEBRA,

a conference that combines a  
SPRING SCHOOL  
with a  
RESEARCH MEETING  
on all aspects of  
SYMBOLIC AND ALGEBRAIC COMPUTATION

**LINZ, AUSTRIA. APRIL 1 - 3, 1985**

Organized by: ACM-SIGSAM, SAME

Sponsored by: Linzer Hochschulfonds,  
Bundesministerium für Wissenschaft  
und Forschung, Academic Press  
SIEMENS, IBM

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chairman), H.G. Zimmer (Saarbrücken, FRG).



# PROGRAM

Monday, April 1, 1985

Morning (invited tutorial lectures):

- B.F. Caviness (USA): Computer Algebra:  
Past and Future
- R. Pavelle (USA): The Power of Present  
Computer Algebra Systems: MACSYMA on  
a LISP-Machine
- D. Stoutemyer (USA): Computer Algebra on  
Micros:  $\mu$ Math on an IBM PC
- V.P. Gerdt (USSR): Survey of  
Computational Algebra in the USSR

Afternoon

Original research contributions and  
demos

Tuesday, April 2, 1985

Morning (invited tutorial lectures):

- J.-M. Drouffe (France): Computer Algebra  
as a Research Tool in Physics
- A.T. Balaban (Rumania): Computer Algebra  
and Chemistry
- T. Beth (England): Algebraic Algorithms  
for Digital Signal Processing,  
Coding Theory and Cryptography
- W. Vogel (GDR): On a Problem of  
R. Hartshorne: A Contribution to  
Computational Problems in Algebraic  
Geometry
- U. Kulisch (FRG): The New Floating-Point  
Arithmetic

Afternoon

Original research contributions and  
demos

Evening (invited tutorial lecture):

- H. Zassenhaus (USA): Algorithms and  
Mathematics: Past, Present, Future

Banquet

Wednesday, April 3, 1985

Morning (invited tutorial lectures):

- A.W. Biermann (USA): Algorithmic Methods  
in Automatic Programming
- G. Huet (France): Construction: A Higher  
Order Proof System for Mechanizing  
Mathematics
- T. Ottmann (FRG): Algorithmic Geometry
- E. Engeler (Switzerland): Scientific  
Computation: The Integration of  
Symbolic, Numeric and Graphic  
Computation

Afternoon

Original research contributions and  
demos

Tutorials and practical demonstrations  
of software systems for symbolic  
(algebraic, analytic, exact) computation  
will be organized including  
MACSYMA,  $\mu$ MATH, REDUCE, FORMAC, CAYLEY,  
PASCAL-SC, ANALITIK SCRATCHPAD-II,  
MAPLE, AMP, ORTOCARTAN, CONSTRUCTION.

Furthermore, computers particularly  
suitable for symbolic computation will  
be presented in an exposition (for  
example the Symbolics LISP-Machine,  
MASSCOMP, IBM-PC, the Parallel  
L-Machine)

The program will also incorporate

- a joint business session of SIGSAM and  
SAME
- a meeting of the editorial board of the  
Journal of Symbolic Computation
- a REDUCE users' meeting
- a panel discussion on future interac-  
tions of computer algebra with other  
areas and other urgent topics