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Nota di contenuto	Template-based formula editing in Kaava -- Algebraic simplification of multiple-valued functions -- In-place arithmetic for polynomials over Zn -- LILK — Static analysis of REDUCE code -- The extensions of the Sisyphe computer algebra system: ulysse and athena -- AlgBench: An object-oriented symbolic core system -- SymO2: Objects and classes for symbolic computation systems -- Building a Computer Algebra environment by composition of collaborative tools -- An assume facility for CAS, with a sample implementation for Maple -- REDUCE meets CAMAL -- Combinatory models and symbolic computation -- A

uniform approach to deduction and automatic implementation -- A simple general purpose technique for interfacing between computer algebra and numerical analysis systems -- Recurrent relations and speed-up of computations using computer algebra systems -- Design and implementation of a retargetable ALDES compiler -- Data representation and in-built compilation in the computer algebra program FELIX -- An abstract data type development of graded rings -- An object-oriented approach to indexed mathematical objects for the manipulation of sums and series.

Sommario/riassunto

DISCO 92 was held on the Newton Park campus of Bath College of Higher Education, England, April 13-15, 1992. Beside the formal lectures dedicated to design and implementation issues of computer algebra, there were several software demonstrations and an opportunity for system designers to compare systems. This volume presents the proceedings of the conference. It contains 18 papers on a variety of design and implementation issues. One general theme which clearly emerges is the need for interconnections between systems, as no one systems incorporates all the facilities that users want. Various effortsare being made to design such links, but generally in limited contexts (suchas the Maple project or the Posso project).