Record Nr. UNISA996465429503316 MFDBS 91 [[electronic resource]]: 3rd Symposium on Mathematical **Titolo** Fundamentals of Database and Knowledge Base Systems, Rostock, Germany, May 6-9, 1991 / / edited by Bernhard Thalheim, Janos Demetrovics, Hans-Detlef Gerhardt Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, 1991 **ISBN** 3-540-47348-3 Edizione [1st ed. 1991.] Descrizione fisica 1 online resource (VIII, 395 p.) Lecture Notes in Computer Science, , 0302-9743; ; 495 Collana Disciplina 005.74 Soggetti Data structures (Computer science) Artificial intelligence Computer programming Computers Database management Combinatorics Data Structures and Information Theory Artificial Intelligence **Programming Techniques** Models and Principles **Database Management** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Complex object multi-level fixpoint queries -- Classifying objectoriented query results in a class/type lattice -- A relational algebra for complex objects based on partial information -- Specifying operations for nested relations by rules and partial orders -- On the relationship between well-founded and stable partial models -- Monadic databases with equality -- Actor-oriented specification of deontic integrity constraints -- Solving ambiguities in updating deductive databases --

On the mean execution time of recursive definitions on relational databases -- Updating hierarchical databases by complex forms -- A

direct algorithm for computing the transitive closure of a two-

dimensionally structured file -- Multi-granularity locking for nested transaction systems -- The Nested Interpolation Based Grid File --Complexity of recursive production rules execution -- On the monotonicity of (LDL) logic programs with set -- Semantic improvement of deductive databases -- On the representation of dependencies by propositional logic -- Pairwise-definable subdirect decompositions of general database schemata -- Functional dependencies in hierarchical structures of data -- Objects in relational database schemes with functional, inclusion and exclusion dependencies -- Abstract data type semantics for many-sorted object query algebras -- Temporal specifications of object behavior --Consistency and non-determinism in a database programming language -- A fact-oriented approach to schema transformation -- A database needs two kinds of negation -- Rationale of the O2 system --The background of the DASDBS & COSMOS projects -- The rationale behind DBPL.

Sommario/riassunto

This volume presents the proceedings of the 1991 Symposium on Mathematical Fundamentals of Database and Knowledge Base Systems, held in Rostock, FRG, May 6-9, 1991. This is the third in a series of biannual MFDBS conferences, which in future will be held together with ICDT, the International Conference on Database Theory. MFDBS 91 covers new developments in theoretical aspects of database and knowledge base systems and the design of databases and knowledge bases. Topics of the conference are: database and knowledge base models; deductive database and knowledge base systems; logical, algebraic and combinatorial fundamentals of database theory and design of databases; object-oriented databases and object-oriented modeling; fundamentals of query languages, transaction processing, distributed databases, concurrency control, access strategies, recovery, security, privacy, safety; fundamentals for integrity constraints and consistency in databases; models for database machines; models for user interfaces; design and implementation of non-standard databases.