CALL FOR PAPERS

Second International Symposium on Foundations of Information and Knowledge Systems (FoIKS 2002)

Schloß Salzau (near Kiel), Germany, February 19 – 23, 2002

supported by the European Association for
Theoretical Computer Science (EATCS)

The goal of the biennial FoIKS symposia is to bring together researchers working on the theoretical foundations of information and knowledge systems and to attract researchers working in mathematical fields such discrete mathematics, combinatorics, logics and finite model theory who are interested to apply their theories to research on database and knowledge base theory. FoIKS took up the tradition of the conference series "Mathematical Fundamentals of Database Systems" (MFDBS) which enabled East-West collaboration in the field of database theory. The first FoIKS symposium was held in Burg/Spreewald (Germany) in 2000. Former MFDBS conferences were held in Dresden (Germany) in 1987, Visegrád (Hungary) in 1989 and in Rostock (Germany) in 1991.

In addition the FoIKS symposium is intended to be a forum for intensive discussions. For this reason the time slot of long and short contributions is 60 and 30 minutes, respectively, followed by 30 and 15 minutes for discussions, respectively. Furthermore, participants are asked in advance to prepare as correspondents to a contribution of another author. In addition, there are special sessions for the presentation and discussion of open research problems.

FoIKS 2002 solicites contributions dealing with any foundational aspect of information and knowledge systems. Typical, but not exclusive topics of interest are:

- Mathematical Foundations: discrete methods, boolean functions, finite model theory, non-classical logics
- Database Design: formal models, dependency theory, schema translations, desirable properties, design primitives, design strategies
- Query Languages: expressiveness, computational and descriptive complexity, query languages for advanced datamodels, classification of computable queries
- Semi-structured databases and WWW: models of web databases, querying semi-structured databases, web transactions and negotiations
- Security in Data and Knowledge bases: cryptography, steganography, information hiding
- Integrity and Constraint management: constraint checking, verification and validation of consistency, consistency enforcement, triggers
- Information Integration: heterogenous data, views, schema dominance and equivalence
- Data- and Knowledge Base Dynamics: models of transactions, models of interaction, updates in data- and knowledge bases, consistency preservation, dynamic consistency, concurrency control, complexity of update propagation
- Intelligent Agents: multi-agent systems, autonomous agents, foundations of software agents, cooperative agents
- Logics in Databases and AI: non-classical logics, temporal logics, non-monotonic logics, spatial logics, probabilistic logics, deontic logic

- Logic Programming: declarative logic programming, constraint programming, inductive logic programming
- Knowledge Representation: planning, description logics, knowledge and belief, belief revision and update, non-monotonic formalisms, uncertainty
- Reasoning Techniques: automated reasoning, satisfiability testing, abduction, induction, theorem proving, constraint satisfaction, common-sense reasoning, probabilistic reasoning, reasoning about actions

Submission of Papers. Authors are cordially invited to submit an abstract by **August 10, 2001** and a paper by **August 17, 2001**. Connect to http://foiks.massey.ac.nz/ and follow the instructions there.

Papers should not exceed 15 pages (single-spaced, 11pt, US letter or A4 paper) for long presentations, and 10 pages for short presentations, respectively. The submissions will be judged for scientific quality and for suitability as a basis for broader discussion. The proceedings will be published by Springer-Verlag in the 'Lecture Notes in Computer Science' series and will be available at the workshop. The proceedings of FoIKS 2000 have been published as LNCS vol. 1762. After the symposium authors of selected papers will be asked to prepare extended versions of their papers for publication in a special issue of the "Annals of Mathematics and Artificial Intelligence".

Program Committee Co-chairs:

Thomas Eiter (Austria), Klaus–Dieter Schewe (New Zealand)

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Organization: Hans-Joachim Klein (Germany), Bernhard Thalheim (Germany)

Important Dates:

Submission of Abstract	August 10, 2001
Submission of Paper	August 17, 2001
Notification of Acceptance/Rejection	October 18, 2001
Camera–ready version	December 2, 2001
Symposium	February 19 – 23, 2002

An up-to-date version of this Call for Papers is available at

http://foiks.massey.ac.nz/cfp.html