

Contact

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Please register for the workshop by September 8, 2006 by e-mail to above address.

The **conference office** is located in Bernhard-von-Cotta Str. 2 and will be open from 8:00, Thursday, September 21, 2006.

The workshop fee is 25 €. The fee includes admission to all sessions, one copy of the proceedings, an excursion and the workshop dinner on Thursday.

We ask you to **pay** the workshop fee by electronic money transfer to

Ostsächsische Sparkasse Dresden
Account-No.: 315 301 1370
BLZ: 850 503 00
Code: 7040/00227-6 BP
IBAN: DE82 8505 0300 3153 0113 70
BIC: OSDDDE81

Alternatively, you can pay in cash at the first day of the workshop.

For a **room**, please contact Freiberg-Information directly as soon as possible using reservation form.

Hotel/Private Home Room Reservation:

Freiberg - Information
Burgstrasse 1
D-09599 Freiberg
Tel. (+49) (0) (3731) 27 32 66
Fax: (+49) (0) (3731) 27 32 60
e-mail: fva@freiberg.de
Online: www.freiberg.de

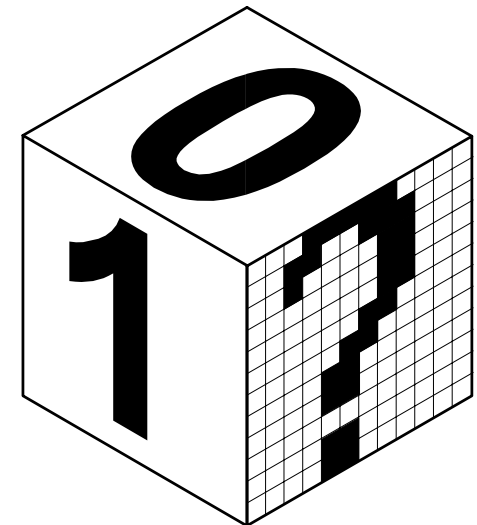
More Information:

http://www.informatik.tu-freiberg.de/prof2/ws_bp7/



Freiberg University
of Mining and Technology

7th International Workshop on Boolean Problems



September 21-22, 2006,
Freiberg (Sachsen)

The workshop on Boolean problems has an emphasis on the problems related to the solution of all kinds of high-dimension Boolean and discrete problems, and provides a forum for researchers and engineers from different disciplines to exchange ideas. The workshop is devoted to theoretical discoveries as well as practical applications. An aim of the workshop is to initiate possible collaborative research and to find new areas of application. It is intended to publish the papers in proceedings. The invited speaker Prof. A. Zakrevskij (National Academy of Sciences, Minsk, Belarus) will present essential results of his research about combinatorial problems in Boolean space.

Topics of Interest

- Data Structures and Algorithms
- Binary Decision Diagram
- Reverse and Quantum Logic
- Logic Design
- Decomposition
- Finite State Machines

General Chair

Prof. Dr.-Ing. habil. B. Steinbach
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Program Committee

- L. Cheremisinova, Academy of Science, Belarus
- D. Debnath, Oakland University, USA
- R. Drechsler, University of Bremen, Germany
- M. A. Perkowski, Portland State University, USA
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- B. Steinbach, University of Freiburg, Germany
- R. Ubar, Tallinn University, Estonia
- M. Velez, Consultant, USA
- A. De Vos, University of Gent, Belgium
- S. Yanushkevich, University of Calgary, Canada
- A. Zakrevskij, Academy of Science, Belarus

Organization

Dr.-Ing. G. Rudolf
Freiberg University of Mining and Technology
Institute of Computer Science
e-mail: Galina.Rudolf@informatik.tu-freiberg.de

Location of the Workshop

Bernhard-von-Cotta Str. 2, 09596 Freiberg
see marked place on the map

Program

Thursday, September 21, 2006

9:00-10:00 Invited Talk (A. Zakrevskij)

A. Zakrevskij (United Institute of Informatics Problems of NAS, Belarus):
Combinatorial Methods of Solving Boolean Problems

10:00 - 10:15 Break

10:15 - 11:45 Session 1

R. S. Stanković (Dept. of Computer Science, Nis, Serbia),
J. Astola (Tampere University of Technology, Finland):
Fourier Representations of Switching Functions for Circuit Design

B. Steinbach (University of Freiberg, Germany):
Adjacency Graph of the SNF as Source of Information

Ch. Dorotska, B. Steinbach (University of Freiberg, Germany):
Boolean Representation of Relationships Between Elements of a Software Model

11:45 - 13:00 Lunch

13:00 - 14:30 Session 2

W.-M. Wendler (University of Applied Sciences Braunschweig/Wolfenbüttel, Germany):
Abstract complex Numbers and Matrices

Ch. Posthoff (The University of The West Indies, Trinidad & Tobago), B. Steinbach (University of Freiberg, Germany):
A Multi-Processor Approach to SAT-Problems

G. Fey, T. Warode, R. Drechsler (University of Bremen, Germany):
Reusing Learned Information in SAT-based ATPG

14:30 - 15:00 Break

15:00 - 16:00 Session 3

S. Stanković, J. Astola (Tampere University of Technology, Finland):
XSLT based method for automatic generation of a graphical representation of a decision diagram represented using XML

O. Keren (Bar Ilan University, Israel), I. Levin (Tel-Aviv University, Israel):
Reduction of the Number of Paths in Binary Decision Diagrams by Linear Transformation of Variables

17:30-21:00

Excursion to brewery "Freiberger Brauhaus" inclusive of Workshop Dinner

Friday, September 22, 2006

9:00 - 10:00 Session 4

A. De Vos, Y. V. Rentergem (University Gent, Belgium):
Group theory for reversible logic

W.-M. Wendler (University of Applied Sciences Braunschweig/Wolfenbüttel, Germany):
Elements of Quantum Mechanics in Finite Fields

10:00 - 10:15 Break

10:15 - 11:45 Session 5

P. Fišer, P. Kubalík, H. Kubátová (Czech Technical University Prague, Czech):
Output Grouping Method Based on a Similarity of Boolean Functions

S. N. Yanushkevich (University of Calgary, Canada),
B. Steinbach (University of Freiberg, Germany), V. P. Shmerko (University of Calgary, Canada):
Interconnect Analysis of Spatial Decomposition of Boolean Functions for Predictable Nanotechnologies

R. Kohut, B. Steinbach (University of Freiberg, Germany),
D. Fröhlich (University of Applied Sciences Mittweida, Germany):
FPGA Implementation of Boolean Neural Networks using UML

11:45 - 13:00 Lunch

13:00 - 14:30 Session 6

I. Levin (Tel-Aviv University, Israel), O. Keren (Bar Ilan University, Israel), V. Ostrovsky (Tel-Aviv University, Israel),
G. Kolotov (Tel-Aviv University, Israel):
Concurrent Decomposition of Multiterminal BDDs

O. Keren (Bar Ilan University, Israel), I. Levin (Tel-Aviv University, Israel), R. S. Stanković (University of Nis, Serbia):
Linearization of Functions Represented as a Set of Disjoint Cubes at the Autocorrelation Domain

Y. Pottosin, E. Shestakov (United Institute of Informatics Problems of NAS, Belarus):
Decomposition of a Boolean Function Using the Generalized Compact Table

14:30 - 15:00 Break

15:00 - 16:00 Session 7

J. Schmidt (Czech Technical University Prague, Czech):
The Attractor Structure of Rule 60 Cellular Automata

A. Fella (University of Sharjah, United Arab Emirates):
Generalized Timed Alternating Finite Automata