

# 6th International Symposium on Representations and Methodology of Future Computing Technology RM2003

March 10-11, 2003  
Trier, Germany

## Program :

### Session 1: 10/03/2003, 9:15--10.45am

- *B. Steinbach, V. Yanchurin, M. Lukac*  
[ON SNF Optimization: A functional Comparison of Methods \(ps\)](#)
- *S. Stergios, G. Papakonstantinou*  
[Towards a General Novel Exact ESOP Minimization Methodology \(ps\)](#)
- *G. R. Pogosyan, I. G. Rosenberg*  
[An Algorithm for Optimal Presentation of a Partial Boolean Function as a MOD2 sum of products \(ps\)](#)

### Session 2: 10/03/2003, 11:15--12.45pm

- *R. S. Stankovic, J. Astola*  
[Application of Group Theory to Optimization Problems in Logic Design \(ps\)](#)
- *M.H.A. Khan, M. A. Perkowski*  
[Logic Synthesis with Cascades of New Reversible Gate Families \(ps\)](#)
- *M. Miller G. Dueck*  
[Spectral Techniques for Reversible Logic Synthesis \(ps\)](#)

### Session 3: 10/03/2003, 16:00--18.00pm

- *M. Ghasemzadeh, C. Meinel*  
[BDDs, Horn Clauses and Resolution \(ps\)](#)
- *T. Hirayama, T. Sato, Y. Nishitani*  
[Minimizing AND-EXOR Expressions of Some Benchmark Functions \(ps\)](#)
- *R. S. Stankovic, K. Egiazarian, M. Stankovic, J. Astola*  
[Construction of Compact Word-Level Representations of Multiple-output Switching Functions by Wavelet Packets \(ps\)](#)
- *A. Iseno, Y. Iguchi, T. Sasao*  
[Fault Diagnosis for RAMS using WALSH Spectrum \(ps\)](#)

### Session 4 (Posters): 10/03/2003, 18:15--19:00pm

- *Y. Pottosin, E. Shestakov, V. Tomashev* (could not take place due to the absence of the authors)  
[Multiplex Decomposition of Boolean Function of its Section Expansion \(ps\)](#)
- *I. Jaganjac*  
[Computing with Cellular Automata \(ps\)](#)
- *A. Al-Rabadi* (could not take place due to the absence of the author)  
[Reversible Logic Synthesis Using Iterativ Symmetry Indices Decomposition \(ps\)](#)
- *G. Fyffe*  
[Emulating XOR-BDDs with Conjunction Equivalence Diagrams \(ps\)](#)

### Session 5: 11/03/2003, 9:15--10.45am

- *J. Mathew, E. Dubrova*  
Totally Self-checking 1-out-of-n Checker with Application to Fault Tolerant Design (CD 2)
- *M. Homeister*  
Well-Structured Graph-Driven Parity-FBDDs (CD 2)
- *Ch. Meinel, H. Sack*

## Variable Reordering von Parity-OBDDs (CD 2)

**Session 6: 11/03/2003, 11:15--12.45pm**

- *M. H.A. Khan, M. A. Perkowski*  
Multi-Output ESOP Synthesis with Cascades of New Reversible Gate Family (CD 2)
- *G. Dueck, D. Maslov*  
Reversible Function Synthesis with Minimum Garbage Outputs (CD 2)
- *D. Maslov, G. Dueck*  
Garbage in Reversible Designs of Multiple Output Functions (CD 2)

**Session 7/8: 11/03/2003, 14:30--16.00pm**

- *A. Al-Rabadi* (could not take place due to the absence of the author)  
New Multiple-Valued Quantum Logic Circuits (CD 2)
- *P. Kerntopf*  
Binary Decision Diagrams based on Single and Multiple Generalized Shannon Expansions (CD 2)
- *G. Yang, W.N.N. Hung, X. Song, M. A. Perkowski*  
Majority-Based Reversible Logic Gate (CD 2)
- *M. Perkowski, M. Lukac, M. Pivtoraiko, P. Kerntopf, M. Folgheraiter*  
A Hierarchical Approach to Computer Aided Design of Quantum Circuits (CD 2)

RM2003 Preliminary Program, Update 18 Mar. 2003, [H. Sack](#)