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Sequences and Their Applications – SETA 2010

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Proceedings

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Preface

This volume contains the refereed proceedings of the *Sixth International Conference on Sequences and Their Applications (SETA 2010)*, held in Paris, France, September 13-17, 2010. The previous five conferences were held in Singapore (Republic of Singapore), Bergen (Norway), Seoul (South Korea), Beijing (China) and Lexington (USA). Topics of SETA include:

- Randomness of sequences
- Correlation (periodic and aperiodic types) and combinatorial aspects of sequences (difference sets)
- Sequences with applications in coding theory and cryptography
- Sequences over finite fields/rings/function fields
- Linear and nonlinear feedback shift register sequences
- Sequences for radar distance ranging, synchronization, identification, and hardware testing
- Sequences for wireless communication
- Pseudorandom sequence generators
- Boolean and vectorial functions for sequences, coding and/or cryptography
- Multidimensional sequences and their correlation properties
- Linear and nonlinear complexity of sequences

The Technical Program Committee of SETA 2010 refereed 56 submitted papers. Each paper was reviewed by at least 2 referees (at least 3 when an author was a TPC member) and the TPC selected 33 papers to be presented at the conference. In addition, we had 4 invited papers, by Robert Calderbank (Princeton University, USA), James Massey (retired from ETH Zurich, Switzerland), Jong-Seon No (Seoul National University, South Korea) and Arne Winterhof (Österreichische Akademie der Wissenschaften, Austria).

The Co-chairs of the TPC were Claude Carlet (Université Paris 8, France) and Alexander Pott (Otto-von-Guericke-Universität, Magdeburg, Germany). They wish to thank the other members of the Program Committee: Thierry P. Berger (Université de Limoges, France); Serdar Boztas (Royal Melbourne Institute of Technology, Australia); Lilya Budaghyan (University of Bergen, Norway); Pascale Charpin (INRIA, France); Gérard Cohen (Télécom ParisTech, France); Cunsheng Ding (Hong Kong University of Science and Technology, PR of China); Pingzhi Fan (Southwest Jiaotong University Chengdu, PR of China); Philippe Gaborit (Université de Limoges, France); Guang Gong (University of Waterloo, Canada); Tor Helleseth (University of Bergen, Norway); Jonathan Jedwab (Simon Fraser University, Canada); Thomas Johansson (Lund University, Sweden); Andrew Klapper (University of Kentucky, USA); Gohar Kyureghyan (Otto-von-Guericke-Universität, Germany); Gregor Leander (Technical University of Denmark); Wilfried Meidl (Sabanci University, Turkey); Sihem Mesnager (Université Paris 8, France); Gary McGuire (University College Dublin, Ireland);
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We thank Springer for financing the best paper award, given by the Journal Cryptography and Communications - Discrete Structures, Boolean Functions and Sequences (CCDS) and awarded to the paper “Appended m-Sequences with Merit Factor Greater Than 3.34”, by Jonathan Jedwab and Kai-Uwe Schmidt.

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Claude Carlet
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Table of Contents

Invited Paper

Low Correlation Zone Sequences ........................................ 1
   Jung-Soo Chung and Jong-Seon No

Algorithmic Aspects

Decimation Generator of Zadoff-Chu Sequences ...................... 30
   Srdjan Budisin

An Algorithm for Constructing a Fastest Galois NLFSR Generating a
Given Sequence .......................................................... 41
   Jean-Michel Chabloz, Shohreh Sharif Mansouri, and Elena Dubrova

Acquisition Times of Contiguous and Distributed Marker Sequences:
A Cross-Bifix Analysis .................................................. 55
   Čedomir Stefanović and Dragana Bajić

Frequency Hopping

Lower Bounds on the Average Partial Hamming Correlations of
Frequency Hopping Sequences with Low Hit Zone .................... 67
   Xianhua Niu, Daiyuan Peng, and Fang Liu

New Families of Frequency-Hopping Sequences of Length $mN$ Derived
from the $k$-Fold Cyclotomy ............................................ 76
   Jin-Ho Chung and Kyeongcheol Yang

Multiple Access Systems

User-Irrepressible Sequences ........................................... 88
   Kenneth W. Shum, Yijin Zhang, and Wing Shing Wong

New Optimal Variable-Weight Optical Orthogonal Codes ............ 102
   Dianhua Wu, Jiayun Cao, and Pingzhi Fan

Invited Paper

Recent Results on Recursive Nonlinear Pseudorandom Number
Generators ............................................................... 113
   Arne Winterhof
# Linear Complexity

A General Approach to Construction and Determination of the Linear Complexity of Sequences Based on Cosets ......................................................... 125

Ayça Çeşmelioğlu and Wilfried Meidl

On the Autocorrelation and the Linear Complexity of $q$-Ary Prime $n$-Square Sequences ................................................................. 139

Fang Liu, Daiyuan Peng, Xiaohu Tang, and Xianhua Niu

An Improved Approximation Algorithm for Computing the $k$-Error Linear Complexity of Sequences Using the Discrete Fourier Transform ......................................................... 151

Ana Sălăgean and Alexandra Alecu

## Finite Fields

Transformations on Irreducible Binary Polynomials ......................... 166

Jean-Francis Michon and Philippe Ravache

Power Permutations in Dimension 32 .................................................. 181

Emrah ÇakCak and Philippe Langevin

## Character Sums

Multiplicative Character Sums with Counter-Dependent Nonlinear Congruential Pseudorandom Number Generators ........................................ 188

Domingo Gomez

Ternary Kloosterman Sums Modulo 18 Using Stickelberger’s Theorem ................................................................. 196

Faruk Gölğlu, Gary McGuire, and Richard Moloney

## Merit Factor

Appended $m$-Sequences with Merit Factor Greater than 3.34 ......................................................... 204

Jonathan Jedwab and Kai-Uwe Schmidt

## FCSR

A With-Carry Walsh Transform (Extended Abstract) ......................... 217

Andrew Klapper and Mark Goresky

Clock-Controlled FCSR Sequence with Large Linear Complexity ........ 229

Zhen Pan, Wei Su, and Xiaohu Tang
Vectorial Conception of FCSR ........................................ 240
Abdelaziz Marjane and Boufeldja Allailou

Hadamard Matrices and Transforms

Fourier Duals of Björck Sequences .................................. 253
Branislav M. Popović

New Constructions of Complete Non-cyclic Hadamard Matrices,
Related Function Families and LCZ Sequences ................. 259
Krystal Guo and Guang Gong

Cryptography

$\mathbb{Z}_4$-Nonlinearity of a Constructed Quaternary Cryptographic Functions
Class ............................................................. 270
Zoubida Jadda and Patrice Parraud

A Public Key Cryptosystem Based upon Euclidean Addition Chains ..... 284
Fabien Herbaut and Pascal Véron

Optimal Authentication Codes from Difference Balanced Functions ..... 298
Yang Yang, Xiaohu Tang, and Udaya Parampalli

Invited Paper

New Extensions and Applications of Welch-Bound-Equality Sequence
Sets ............................................................... 305
James L. Massey

Statistical Analysis

Evaluation of Randomness Test Results for Short Sequences ........ 309
Fatih Sulak, Ali Doğanaksoy, Barış Ege, and Onur Koçak

Statistical Analysis of Search for Set of Sequences in Random and
Framed Data .................................................... 320
Dragana Bajić and Ćedomir Stefanović

Boolean Functions and Related Problems

On the Nonlinearity of Discrete Logarithm in $\mathbb{F}_{2^n}$ ............. 333
Risto M. Hakala and Kaisa Nyberg

On a Conjecture about Binary Strings Distribution .................. 346
Jean-Pierre Flori, Hugues Randriam, Gérard Cohen, and
Sihem Mesnager
Nega–Hadamard Transform, Bent and Negabent Functions .......... 359
   Pantelimon Stănică, Sugata Gangopadhyay, Ankita Chaturvedi,
   Aditi Kar Gangopadhyay, and Subhamoy Maitra

Synchronization of Boolean Dynamical Systems: A Spectral
Characterization .................................................. 373
   Jérémy Parriaux, Philippe Guillot, and Gilles Millérioux

Nonbinary Sequences

Some Constructions of Almost-Perfect, Odd-Perfect and Perfect
Polyphase and Almost-Polyphase Sequences ....................... 387
   Evgeny I. Krengel

Almost p-Ary Perfect Sequences ................................ 399
   Yeow Meng Chee, Yin Tan, and Yue Zhou

Sequences, Bent Functions and Jacobsthal Sums .................... 416
   Tor Helleseth and Alexander Kholosha

Infinite Sequences

Infinite Sequences with Finite Cross-Correlation ................... 430
   Solomon W. Golomb

Invited Paper

Reed Muller Sensing Matrices and the LASSO ....................... 442
   Robert Calderbank and Sina Jafarpour

Author Index ....................................................... 465