Program of SETA 2010

Monday

Morning

8h45-9h Opening the conference: Yves Poilane, Head of Telecom ParisTech

9h-10h Invited Talk: Jong-Seon No: Low Correlation Zone Sequences

10h-10h30 Coffee break

10h30-12h Algorithmic aspects
   - Srdjan Budisin: Decimation Generator of Zadoff-Chu Sequences
   - Jean-Michel Chabloz, Shohreh Mansouri, Elena Dubrova: An Algorithm for Constructing a Fastest Galois NLFSR Generating a Given Sequence
   - Cedomir Stefanovic, Dragana Bajic: Acquisition Times of Contiguous and Distributed Marker Sequences: A Cross-Bifix Analysis

Afternoon

14h-15h Frequency hopping
   - Xianhua Niu, Daiyuan Peng, Fang Liu: Lower Bounds on the Average Partial Hamming Correlations of Frequency Hopping Sequences with Partial Low Hit Zone
   - Jin-Ho Chung, Kyongcheol Yang: New Families of Frequency-Hopping Sequences of Length mN Derived from the k-Fold Cyclotomy

15h-15h30 Coffee break

15h30-16h30 Multiple access systems
   - Kenneth Shum, Yijin Zhang, Wing Shing Wong: User-irrepressible sequences
   - Wu Dianhua, Cao Jiayun, Fan Pingzhi: New Optimal Variable-Weight Optical Orthogonal Codes

Tuesday

Morning

9h-10h Invited Talk: Arne Winterhof: Recent Results on Recursive Nonlinear Pseudorandom Number Generators.

10h-10h30 Coffee break
10h30-12h **Linear complexity**
- Ayca Cesmelioglu, Wilfried Meidl: A General Approach to Construction and Determination of the Linear Complexity of Sequences Based on Cosets
- Fang Liu, Daiyuan Peng, Xiaohu Tang, Xianhua Niu: On the Autocorrelation and Linear Complexity of q-ary Prime n-square Sequences
- Ana Salagean, Alexandra Alecu: An Improved Approximation Algorithm for Computing the k-error Linear Complexity of Sequences Using the Discrete Fourier Transform

**Afternoon**

14h-15h **Finite fields**
- Jean-Francis Michon, Philippe Ravache: Transformations on Irreducible Binary Polynomials
- Philippe Langevin, Emrah CakCak: Power Permutations in Dimension 32

15h-15h30 Coffee break

15h30-16h30 **Character sums**
- Domingo Gomez: Multiplicative Character Sums with Counter-Dependent Nonlinear Congruential Pseudorandom Number Generators
- Faruk Gölğlu, Gary McGuire, Richard Moloney: Ternary Kloosterman Sums Modulo 18 Using Stickelberger’s Theorem

16h30-17h **Merit factor**
- Jonathan Jedwab, Kai-Uwe Schmidt: Appended m-Sequences with Merit Factor Greater Than 3.34

17h-17h30 **Best paper award ceremony**

**Wednesday (morning)**

9h-10h30 **FCSR**
- Andrew Klapper, Mark Goresky: A With-Carry Walsh Transform
- Zhen Pan, Wei Su, Xiaohu Tang: Clock-Controlled FCSR Sequence with Large Linear Complexity
- Abdelaziz Marjane, BoufElDja Allailou: Vectorial Conception of FCSR

10h30-11h Coffee break

11h-12h **Hadamard matrices and transforms**
- Branimar Popovici: Fourier Duals of Björck Sequences
- Krystal Guo, Guang Gong: New Constructions of Complete Non-cyclic Hadamard Matrices, Related Function Families and LCZ Sequences
Thursday

Morning

9h-10h30 Cryptography
   - Zoubida Jadda, Patrice Parraud: $\mathbb{Z}_4$ -Nonlinearity of a Constructed Quaternary Cryptographic Functions Class
   - Pascal Véron, Fabien Herbaut: A Public Key Cryptosystem Based Upon Euclidean Addition Chains
   - Yang Yang, Xiaohu Tang, Udaya Parampalli: Optimal Authentication Codes from Difference Balanced Functions

10h30-11h Coffee break

11h-12h Invited Talk: James Massey: New Extensions and Applications of Welch-Bound-Equality Sequence Sets

Afternoon

14h-15h Statistical analysis
   - Fatih Sulak, Ali Doğanaksoy, Barış Ege, Onur Koçak: Evaluation of Randomness Test Results for Short Sequences
   - Dragana Bajic, Cedomir Stefanovic: Statistical Analysis of Search for Set of Sequences in Random and Framed Data

15h-15h30 Coffee break

15h30-17h30 Boolean functions and related problems
   - Risto Hakala, Kaisa Nyberg: On the Nonlinearity of Discrete Logarithm in $\mathbb{F}_p$
   - Jean-Pierre Flori, Hugues Randriambololona, Gérard Cohen, Sihem Mesnager: On a Conjecture About Binary Strings Distribution
   - Pantelimon Stanica, Sugata Gangopadhyay, Ankita Chaturvedi, Aditi Kar Gangopadhyay, Subhamoy Maitra: Nega–Hadamard transform, Bent and Negabent Functions
   - Jérémy Parriaux, Philippe Guillot, Gilles Millérioux: Synchronization of Boolean Dynamical Systems: a Spectral Characterization

Friday

Morning

9h-10h30 Nonbinary sequences
   - Evgeny Krengel: Some constructions of almost-perfect, odd-perfect and perfect polyphase and almost-polyphase sequences
   - Yeow Meng Chee, Yin Tan, Yue Zhou: Almost $p$-ary Perfect Sequences
   - Tor Helleseth, Alexander Kholosha: Sequences, Bent Functions and Jacobsthal Sums

10h30-11h Coffee break
11h-11h30 **Infinite sequences**

*Solomon Golomb*: Infinite Sequences With Finite Cross-Correlation.

11h30-12h30 **Invited Talk**: *Rob Calderbank*: Reed Muller Sensing Matrices and the LASSO.