

LOOPS'15 CONFERENCE PROGRAM (THIRD DAY)

03.07.2015

Morning session

Session chair: David Stanovský

Applications of quasigroups in cryptography and coding theory

- 9:00 - 9:40 Invited talk: **Smile Markovski**: *Design of crypto primitives based on quasigroups*
 9:40 - 9:50 D. Gligoroski, S. Markovski, Lj. Kocarev: *Edon family of stream ciphers defined by quasigroup*
 H. Mihajloska, D. Gligoroski and S. Samardjiska: *π -Cipher from the Theory of Quasigroups Perspective*
 10:00 - 10:20 V. Bakeva, V. Dimitrova and M. Kostadinovski: *Some Properties of PRNG based on the Parastrophic Quasigroup Transformation*
 10:20 - 10:40 Z. Trajcheska and V. Dimitrova: *Using Quasigroups to Design Binary 8×8 Matrices with Branch Number 5*
 10:40 - 11:00

11:00 - 11:30

Coffee break

Session chair: Aleksandar Krapež

- 11:30 - 11:50 D. Mechkaroska, A. Popovska-Mitrovikj and V. Bakeva: *Performance of Random Codes Based on Quasigroups in Gaussian channel*
 11:50 - 12:10 A. Popovska-Mitrovikj, S. Markovski and V. Bakeva: *New Decoding Algorithms for Random Codes Based on Quasigroups*
 12:10 - 12:30 V. Ilievski, A. Popovska-Mitrovikj and V. Bakeva: *Transmission of Audio Files using Random Codes Based on Quasigroups*
 12:30 - 12:50 N. Ilievska and D. Gligoroski: *Impact of the quasigroup order on probability of undetected errors on a model of error-detecting linear code*
 12:50 - 13:00 N. Ilievska and D. Gligoroski: *A model of error-detecting linear code with fixed length redundancy*
 13:00 - 13:20 V. Dimitrievska Ristovska: *Results of testing an algorithm for constructing low-discrepancy sequences over F_b*

14:00 - 18:00

EXCURSION TO ST. NAUM MONASTERY BY BOAT

21:00 - 24:00

BEER PARTY - COURTESY OF SKOPJE BREWERY "SKOPSKA PIVARA "
 MUSIC ENSAMBLE "PORTAL" FROM "UGD" - ŠTIP

LAST CONFERENCE DAY, 4 JULY

10:00 - 12:00

Round Table and Panel Discussion