

**Национален семинар с международно участие
по Теория на кодирането „Професор Стефан Додунеков“
Арбанаси, 21-24.11.2024 г.**

Научна програма

22.11.2024 г.

(Chair Tsonka Baicheva)

- 09.00 – 09.20 **Todorka Alexandrova, Hristo Kostadinov, Nikolay Manev**, Integer codes for t^2 - TQAM modulation.
- 09.20 – 09.40 **Tsonka Baicheva, Svetlana Topalova**, New $(v, k, 1)$ optical orthogonal codes and cyclic $(v, k, 1)$ designs.
- 09.40 – 10.00 **Svetlana Topalova, Stela Zhelezova**, New KTS (57).
- 10.00 – 10.20 **Stefka Bouyuklieva, Piya Bouyukliev**, On the parameters of the projective self-dual (PSD) codes.

10.00 – 10.30 Кафе-пауза

(Chair Hristo Kostadinov)

- 10.30 – 10.50 **Assia Rousseva, Ivan Landjev, Konstantin Vorobev**, A new reducibility result for griesmer minihypers.
- 10.50 – 11.10 **Ivan Landjev, Artyom Mironov**, Some notes on blocking sets in projective planes.
- 11.10 – 11.30 **Maryam Bajalan**, Annihilator CSS Construction and Self-Orthogonal Codes.
- 11.30 – 11.50 **Венцислав Полименов, Красимира Иванова**, Техники за дълбоко самообучение в подкрепа на дистанционното наблюдение.

12.00 – 15.00 Обяд

(Chair Stefka Bouyuklieva)

- 15.00 – 15.20 **Arsenii Sagdeev**, Cutting Corners.
- 15.20 – 15.40 **Stefan Ivanov**, Heterotic Supersymmetry, Strominger System and Equations of Motion.
- 15.40 – 16.00 **Nikolaj Glazunov**, Extremal functions on moduli spaces and applications.
- 16.20 – 17.20 **Мария Пашинска - Гаджева**, Оптимизация и паралелизация на алгоритми, свързани с теория на кодирането, предзащита на дисертация.

19.00 Вечеря

23.11.2024 г.

(Chair *Ivan Landjev*)

- 09.00 – 09.20 **Danila Cherkashin, Pavel Prozorov**, The number of trees in distance-hereditary graphs and their friends.
- 09.20 – 09.40 **Silvia Boumova, Vesselin Drensky, Şehmus Findık**, Dihedral invariants of the free associative algebra of rank two.
- 09.40 – 10.00 **Peter Boyvalenkov, Danila Cherkashin**, On kissing numbers of codes with forbidden distances.
- 10.00 – 10.20 **Peter Dragnev, Peter Boyvalenkov**, On universal optimality of distance-avoiding spherical codes.

10.20 – 10.50 *Кафе-пауза*

(Chair *Peter Boyvalenkov*)

- 10.50 – 11.10 **Miroslav Markov, Yuri Borissov**, Computing the weight distribution of the binary Reed-Muller codes of small parameters.
- 11.10 – 11.30 **Valentin Bakoev**, Mirror (Left-recursive) Binary Gray Code.
- 11.30 – 11.50 **Peter Kazakov**, OBZCPs: Fuzzy search and designs for harmony.
- 11.50 – 12.10 **Antoaneta Tsvetanova, Stela Zhelezova**, On some properties of cyclic STS(v) of small order.

12.00 – 15.00 *Обяд*

(Chair *Konstantin Delchev*)

- 15.00 – 15.20 **Artem Kovtun**, Research of the dynamics of a non-binary system with a directed influence.
- 15.20 – 15.40 **Georgi Gachev, Konstantin Delchev**, Some further results on two-distance codes with concrete parameters.
- 15.40 – 16.00 **Violeta Ivanova-Rohling, Konstantin Delchev, Niklas Rohling**, Efficient exchange-only quantum computation via reinforcement learning. */online/*
- 16.00 – 16.20 **Konstantin Delchev, Violeta Ivanova-Rohling, Niklas Rohling**, Construction of mutually unbiased subspaces in composite dimensions and their relations to quantum measurements. */online/*

19.00 *Работна вечеря*