

PROGRAM

Webinar from the series "Scientific results"

26 November 2020

SCALABLE METHODS AND ALGORITHMS

14:00 – 15:20

1. A. Betten, **S. Topalova**, S. Zhelezova, New Uniform Subregular Parallelisms of $PG(3,4)$ Invariant Under an Automorphism of Order 2
2. Z. Dimitrova, V. Dimitrov, D. Borissova, **I. Garvanov**, M. Garvanova, Two-stage search-based approach for determination and sorting of mountain hiking routes using directed weighted multigraph
3. **S. Fidanova**, G. Luque, New local search procedure for workforce planning problem
4. **N. Kyurkchiev**, A New Class of "Growth Functions" with Polynomial Variable Transfer Generated by Real Reaction Networks
5. N. Kyurkchiev, **A. Iliev**, A. Rahnev, Comments on the Half Logistic Inverse Rayleigh (HLIR) CDF with "Polynomial Variable Transfer". Some Applications
6. **I. Lirkov**, Performance Analysis of a Scalable Algorithm for 3D Linear Transforms on Supercomputer with Intel Processors/coprocessors
7. **T. Rangelov**, P. Dineva, G. Manolis, Numerical Solution of Integro- Differential Equations Modelling the Dynamic Behavior of a Nano-Cracked Viscoelastic Half-Plane
8. **K. Shterev**, E. Manoach, Geometrically Non-linear Vibration of a Cantilever Interacting with Rarefied Gas Flow

APPLICATIONS

15:20 – 16:10

9. **M. Atanasova**, I. Dimitrov, S. Ivanov, Molecular Dynamics Simulations of Acetylcholinesterase - Beta-amyloid Peptide Complex
10. **I. Doytchinova**, A. Tchorbanov, Design of Multi-epitope Vaccine against SARS-CoV-2
11. **H. Chervenkov**, V. Ivanov, G. Gadzhev, K. Ganev, Trend Analysis of CMIP5 Ensemble of Climate Indices over Southeast Europe with Focus on Agricultural Impacts
12. H. Chervenkov, **V. Ivanov**, G. Gadzhev, K. Ganev, D. Melas, Degree-day Climatology over Central and Southeast Europe for the period 1961–2018 - evaluation in High Resolution
13. **S. Gocheva-Ilieva**, A. Ivanov, Y. Livieris, High Performance Machine Learning Models of Large Scale Air Pollution Data in Bulgarian City