# HPC 2024 Conference

# Report of Contributions

Contribution ID: **1** Type: **not specified**

# National Center for High-performance and Distributed Computing (NCHDC)

*Friday, 15 November 2024 10:10 (20 minutes)*

**Presenter:** KARAIVANOVA, A.

Contribution ID: **2** Type: **not specified**

# National Geoinformation Center (NGIC):

*Friday, 15 November 2024 10:30 (15 minutes)*

**Presenter:** TRIFONOVA, P.

Contribution ID: **3** Type: **not specified**

# The National Center of Competence

*Friday, 15 November 2024 14:00 (15 minutes)*

**Presenter:** KARAIVANOVA, A.

Contribution ID: **4** Type: **not specified**

# NCC Bulgaria service portfolio

*Friday, 15 November 2024 16:00 (15 minutes)*

**Presenter:** ATANASSOV, E.

Contribution ID: **5** Type: **not specified**

# HPDA services for industry

*Friday, 15 November 2024 16:15 (15 minutes)*

**Presenter:** KISIMOV, V.

Contribution ID: **6** Type: **not specified**

# Success stories for HPC/HPDA/AI usage by SMEs

**Presenter:** PROYKOVA, A.

Contribution ID: **7** Type: **not specified**

# Case study 1

*Friday, 15 November 2024 16:30 (10 minutes)*

**Presenter:** ATANASSOV, E.

Contribution ID: **8** Type: **not specified**

# Success stories for HPC/HPDA/AI usage by SMEs

**Presenter:** STEFANOVA, K.

Contribution ID: **9** Type: **not specified**

# Success stories 2- SU

Contribution ID: **10** Type: **not specified**

# Success stories 1 - IICT

Contribution ID: **11** Type: **not specified**

# Success stories 2- IICT

Contribution ID: **12** Type: **not specified**

# National Interdisciplinary Research E-Infrastructure for Bulgarian Language and Cultural Heritage Resources and Technologies (CLaDA-BG)

*Friday, 15 November 2024 10:45 (15 minutes)*

**Presenter:** SIMOV, K.

Contribution ID: **13** Type: **not specified**

# Distributed System of Scientific Collections (DiSSCo)

*Friday, 15 November 2024 11:00 (15 minutes)*

**Presenter:** GEORGIEV, B.

Contribution ID: **14** Type: **not specified**

# Constructing PG(3,4) parallelisms using the supercomputer Avitohol

*Friday, 15 November 2024 11:15 (10 minutes)*

**Presenter:** S. TOPALOVA, S. Bancheva,

Contribution ID: **15** Type: **not specified**

# Features of the formation and distribution of the fine particulate matter in different scales

*Friday, 15 November 2024 11:25 (10 minutes)*

**Presenter:** IVANOV, V.

Contribution ID: **16** Type: **not specified**

# Evaluation of Emission Factors for Particulate Matter and NO2 from Road Transport in Sofia, Bulgaria

*Friday, 15 November 2024 11:35 (10 minutes)*

**Presenter:** DIMITROVA, R.

Contribution ID: **17** Type: **not specified**

# HPC for Hyperparameter Optimization on a Neuromorphic Brain Signal Decoder

*Friday, 15 November 2024 11:45 (10 minutes)*

**Presenter:** P. KOPRINKOVA-HRISTOVA, G. Rusev,

Contribution ID: **18** Type: **not specified**

# High-performance computing for distributed and federated machine and deep learning

*Friday, 15 November 2024 11:55 (10 minutes)*

**Presenter:** LAZAROVA, M.

Contribution ID: **19** Type: **not specified**

# In silico analysis of immunogenic proteins of viral origin

*Friday, 15 November 2024 12:05 (10 minutes)*

**Presenter:** DONEVA, N.

Contribution ID: **20** Type: **not specified**

# The European Digital Innovation Hub Zagore

*Friday, 15 November 2024 15:00 (15 minutes)*

**Presenter:** ANGELOVA, G.

Contribution ID: **21** Type: **not specified**

# The European Digital Innovation Hub Trakia

*Friday, 15 November 2024 14:15 (15 minutes)*

**Presenter:** MINCHEV, Z.

Contribution ID: **22** Type: **not specified**

# The Riskmap.bg Platform - collaborative work between Bulgarian researchers and local stakeholders

*Friday, 15 November 2024 14:30 (15 minutes)*

**Presenter:** DOBRINKOVA, N.

Contribution ID: **23** Type: **not specified**

# Collaborative work -EEA, NMNHS, IICT-BAS

*Friday, 15 November 2024 14:45 (15 minutes)*

**Presenter:** SERBEZOV, R.

Contribution ID: **24** Type: **not specified**

# Case study 2

*Friday, 15 November 2024 16:40 (10 minutes)*

**Presenter:** PROYKOVA, A.

Contribution ID: **25** Type: **not specified**

# Case study 3

*Friday, 15 November 2024 16:50 (10 minutes)*

**Presenter:** STEFANOVA, K.

Contribution ID: **26** Type: **not specified**

# DFT calculations of molecular structure and spectral properties of tautomeric molecules and/or their metal complexes

*Friday, 15 November 2024 12:15 (15 minutes)*

**Presenter:** AHMEDOVA, D.

Contribution ID: **27** Type: **not specified**

# Round table discussion

*Friday, 15 November 2024 17:00 (30 minutes)*

**Presenters:** IBM (”ACCELERATING STARTUPS WITH AI (WATSONX) AND CLOUD TECHNOLOGY”);, Z. Abdulrahim,G. Kaludov, R. Nikolov,; VEM TECHNOLOGY;, D. Boykov; PAYHAWK;, D. Dimitrov; RISK ELECTRONICS, G. Kisyov,