NCC Bulgaria

Prof. Aneta Karaivanova, IICT, NCC leader



- NCC Bulgaria goal: to enhance and develop the competences of the Bulgarian computational community, making full use of EuroHPC resources and the EuroCC partnership
- Partners: Institute of Information and Communication Technologies -BAS (IICT), <u>www.iict.bas.bg</u>, Sofia University "St. Kliment Ohridski" (SU), uni-sofia.bg, University of National and World Economy (UNWE), unwe.bg
 - The three partners carry diverse technical and scientific background in the area of HPC and ICT in general, so as to ensure achievement of the project objectives and guarantee the overall success.

NCC UK – NCC Bulgaria twinning and collaboration, 18 – 20 July 2022



Day 1: Training and skills development

- Opening and participants introduction
- 14:10 15:10 Training programmes and experience of NCC UK

EPCC – PG courses and training for academia & computational sci researchers (D.

Henty)

Hartree Centre - Explain Program & training for businesses and industry(E. Alexandrova)

• 15:10 – 16:00) Training priorities and experience in Bulgaria:

Analysis of BG training study results (A. Karaivanova)

Training for Large RIs (A. Proykova)

Data Security (V. Dimitrov)

- 16:00 16:20 Coffee break
- 16:20 17:30 Discussion: Joint activities towards online training (Moderator: E. Atanassov)



10:00 – 15:00 NCC - Industry Collaboration Day

- 10:05 10:20 IICT and EDIHs (Prof. G. Angelova, Director of IICT)
- 10:25 10:35 EDIH Trakia (Svetlin Iliev, Union for Private Economic Enterprise)
- 10:35 11:05 Approaches and exemplar case studies of working with industry (V. Alexandrov, NCC UK)
- 11:05 11:25 **Coffee break**
- 11:25 11:45 Approaches and policy for working with industry using HPC (E. Atanassov, NCC BG)
- 11:45 12:05 HPC/HPDA/AI: Infrastructures, Services and Activities to Support the Businesses (K. Stefanova, NCC BG)
- 12:05 12:25 HPC/HDPA/AI Applications in Data Analytics, Natural Language Processing and Information Retrieval (M. Nisheva, NCC BG)
- 12:25 12:45 Supercomputer Applications in Biomedical Engineering (St. Harizanov, NCC BG)
- 12:45 13:05 Simulation of trimaran motion in multiphase flow conditions (T. Gurov, E. Atanassov, NCC BG)
- 13:05 14:00 **Networking Lunch**
- 14:00 15:00 Discussion: Promising approaches to working with SMEs and industry (Moderator V. Alexandrov)

DAY 3



20 July (Wednesday), 10:00 – 13:00 (Experts' meeting)

- 10:00 10:05 Opening and participants introduction
- 10:05 10:25 HPDA-based Software architecture, ETL and Data analytics for Smart Agriculture (Yavor Hristov)
- 10:25 11:00 HPC facilities in Bulgaria (I. Dimov, E. Atanassov)
- 11:00 11:30 Hybrid Quantum/Classical and Quantum Computing uptake in UK (Stefano Mensa)
- Coffee break (15')
- 11:45 12:15 Using quantum annealers for solving optimization problems (Hr. Djidjev, IICT)
- 12:15 12:35 How business prepares now for the quantum computing future (N. Zlateva, SU)
- 12:35 13:30 **Discussion**: Planning for future collaborative actions