





# Scientific Program

## **February 17 (Friday)**

9:00 - 9:30 Registration

9:30 - 10:00 Opening

<u>Chairman:</u> Stoyan Markov

10:00 – 10:45 Florian Berberich (Juelich, Germany), *PRACE:*World class HPC Services for Science

10:45 - 11:15 Coffee break

<u>Chairman:</u> Krassimir Georgiev

11:15 – 12:00 Christopher Johnson (EPPC, UK), *HECToR: the UK national supercomputing service* 

12:00 – 12:45 Ivan Girotto (ICHEC, Ireland), Porting highly computational intensive applications to hybrid systems: case studies from the Irish Centre for High-End Computing (ICHEC)

12:45 - 13:45 Lunch

### <u>Chairman:</u> Svetozar Margenov

- 13:45 14:30 Rossen Apostolov (ScalaLife Project, Sweden),

  ScalaLife Scalable Software Services for Life
  Science
- 14:30 15:15 Vit Vondrak (VSB, Czech Republic), *FLOREON+* system HPC service for floods prediction
- 15:15 16:00 Zdenec Dostal (VSB, Czech Republic), Scalable algorithms for multibody contact problems:

  Toward massively parallel implementation and industrial applications

#### 16:00 - 16:30 *Coffee break*

### Chairman: Emanouil Atanasov

- 16:30 17:15 Danica Stojilkovic (IPB, Serbia), High-Performance Computing Infrastructure for South East Europe's Research Communities (HP-SEE) project along with some selected supported applications
- 17:15 18:00 Murat Manguoglu (METU, Turkey), Parallel
  Algorithms for Solution of Large Sparse Linear
  Systems with Applications

## **February 18 (Saturday)**

<u>Chairman:</u> Ivan Dimov

- 9:00 9:45 Svetozar Margenov (NCSA&IICT-BAS, Bulgaria),

  HPC infrastructure development in Bulgaria
- 9:45 10:30 Vassil Aleksandrov (BSC, Spain), Scalable algorithms approaches for solving problems with uncertainties

10:30 - 11:00 Coffee break

<u>Chairman:</u> Vassil Alexandrov

- 11:00 11:45 Emanouil Atanassov (IICT-BAS, Bulgaria),

  Stochastic modelling of electron transport

  problems on different HPC architectures
- 11:45 12:30 Georgi Vayssilov (NCSA&SU, Bulgaria),

  Computational modeling of the structure and
  dynamics of nanosized systems and surfaces
- 12:00 13:15 Plamenka Borovska (NCSA&TU-Sofia, Bulgaria),

  Performance scalability of the Bulgarian

  supercomputer IBM BlueGene/P for biological

  sequence processing

13:15 - 14:15 Lunch

Chairman: Aneta Karaivanova

- 14:15 14:45 Miroslav Rangelov (NCSA, Bulgaria), *Ribosome*MD simulations using inmplicit solvent model
- 14:45 15:15 Sofia Ivanovska (IICT-BAS, Bulgaria), Efficient estimation of financial options using heterogeneous GPU resources
- 15:15 15:45 Coffee break
- 15:45 16:30 Discussion on HPC Approaches on Life Sciences and Chemistry (Moderators: *Stoyan Markov* and *Svetozar Margenov*)
- 16:30 Closing