

LUMI Day Poland 2023 April 14th 2023

# The Polish National Competence Centre in HPC



- **CI TASK** Centre of Informatics Tricity Academic Supercomputer & Network
- **Cyfronet** Academic Computer Centre Cyfronet AGH project leader
- ICM Interdisciplinary Centre for Mathematical and Computational Modelling UW (supporting partner)
- NCBJ National Centre for Nuclear Research
- PCSS Poznan Supercomputing and Networking Center
- WCSS Wrocław Centre for Networking and Supercomputing



OMPETENCII HPC

## **EuroHPC**





- The European High Performance Computing Joint Undertaking
  - 32 participating countries
  - the European Union (represented by the European Commission)
  - private partners



#### Goals

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- deploy top-of-the-range supercomputing infrastructures across Europe to support European HPC users wherever they are in Europe
- implement an ambitious research and innovation agenda to develop a competitive HPC ecosystem and supply chain in Europe, which includes hardware, software, applications but also training and skills





#### **LUMI Consortium Partners**

Estonia: Estonian Scientific Computing Infrastructure

Countries which have signed the EuroHPC Declaration

UMI Consortium countries

CSC Datacenter in Kajaani

- Finland: CSC IT Center for Science Ltd.
- Belgium: Belgian Science Policy Office
- Czech Republic: VSB Technical University of Ostrava, IT4Innovations National Supercomputing Centre
- Denmark: Universities Denmark
- Iceland: University of Iceland
- Norway: UNINETT Sigma2 AS
- Poland: AGH University of Science and Technology, Academic Computer Centre Cyfronet AGH
- Sweden: Swedish Research Council, Vetenskapsrådet
- Switzerland: ETH Zürich

#### **LUMI system share**



#### 50% of LUMI resources allocated to EuroHPC JU

- access available through EuroHPC open calls
- · 50% of resources allocated to consortium members
  - Poland has 2,3% share
  - access to Polish resources available via PLGrid

## **EuroHPC JU Calls for access**



- Development
  - code and algorithm development and optimization
- Benchmark
  - code scalability tests, the outcome to be included in future Extreme Scale and Regular Access call
- Regular access

  - large-scale projects
     enabling progress and innovation in their domains
- Extreme Scale
  - extremely large allocations (compute time, storage, support)
    high-impact and high-gain innovative research

#### **EuroHPC Development Access Call**



- multiple cut-off dates (1st day of every month)
- projects from academia, industry or part of large public or private funded initiatives (NCCs, CoEs)
- small number of node hours
- allocation period: one year
- renewable up to 2 times

#### **EuroHPC Benchmark Access Call**



- multiple cut-off dates (1st day of every month)
- limited number of node hours
- maximum allocation period: 3 months

## EuroHPC Benchmark and Development Access Call

- submissions through portal: <u>https://pracecalls.eu/</u>
  systems provided:
  - Vega (Slovenia) CPU and GPU
  - Karolina (Czech Republic) CPU and GPU
  - MeluXina (Luxembourg) CPU and GPU
  - Discoverer (Bulgaria) CPU
  - LUMI (Finland) CPU and GPU

#### **EuroHPC Regular Access**



- multiple cut-off:
  - 7th July 2023
  - 3rd November 2023
- development of innovative solutions tackling societal and/or technological challenges
- · all fields of science, industry and public sector
- allocations for one year
- option to apply for one additional year

#### **EuroHPC Regular Access**



#### submissions through portal (will open soon): <u>https://pracecalls.eu/</u>

#### systems provided:

- Vega (Slovenia) CPU and GPU
- Karolina (Czech Republic) CPU and GPU
- MeluXina (Luxembourg) CPU and GPU
- <u>Discoverer (Bulgaria)</u> CPU
- LUMI (Finland) CPU and GPU
- Leonardo (Italy) CPU and GPU
- MareNostrum 5 (Spain) CPU

#### EuroHPC JU Call for Proposals for Extreme Scale access mode



- multiple cut-off
  - 28th April 2023
  - 28th September 2023
- systems provided:
  - LUMI (Finland) 3rd on the TOP500 list, CPU and GPU
  - Leonardo (Italy) 4th on the TOP500 list, CPU and GPU
- allocations for one year

### EuroHPC JU Call for Proposals for Extreme Scale access mode



- submissions through portal (will open soon): <u>https://pracecalls.eu/</u>
- open for all categories (scientific, industry, public sector)
- evaluation based on technical review and scientific peer-review
- ranking criteria: excellence, innovation, impact, quality of implementation





## Thanks!





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