15th Icelandic HPC Community Workshop
Gróska, Bjargargötu 1, 102 Reykjavik – Entrance A, 1st Floor, Room Fenjamýri
29th April 2024 – 5:00 – 7:00 p.m. GMT

Background

The Icelandic High-Performance Computing (IHPC) activities are increasing in academia and industry that also includes related areas such as Artificial Intelligence (AI), Machine Learning (ML), Data Analytics, and Data Sciences. As a result, the IHPC community members created Icelandic Simulation and Data Labs (SDLs)[1], including academic and industrial partners. They form together in a bottom-up fashion the IHPC National Competence Center for HPC & AI in Iceland partly funded by the EuroHPC Joint Undertaking EuroCC project. The IHPC community seeks more collaborations and new members. Based on our successful previous IHPC workshops, we continue with bi-monthly workshops.

Objectives

This workshop aims to bring together a diverse group of Icelandic and international stakeholders to discuss the role of HPC and related areas within Iceland without losing sight of its international links.

The specific objectives of the workshop are to:

- **Document competencies, achievements, activities, and lessons learnt** from participating stakeholders of Icelandic HPC efforts and associated international activities.
- **Perform community building** in developing new successful joint activities between academia and industry, potentially creating new joint Simulation and Data Labs or collaborations.
- **Identify best practices and core principles with a set of recommendations** for developing the future Icelandic HPC ecosystem, including necessary skills, funding opportunities, applications, Centre of Excellences, community events, and sustainable infrastructure developments.

Participants

Approximately 35-40 participants from Iceland, Germany, and the USA. Participants will include:

- Selected Icelandic companies and SMEs from different sectors with interest in HPC & AI
- Academic representatives from the University of Iceland and Simulation and Data Labs
- The Icelandic Center for Research (Rannís), Startup Iceland, and Icelandic Technology Clusters
- US company that forms government, industry, and academic cooperative research coalitions

Output

The following outputs are expected:

- A short synthesis paper that documents Icelandic competencies, field experiences and achievements in using and/or offerings HPC & AI solutions and consideration of 'best practices'
- Update on a strategy paper responding to HPC & AI issues and challenges identified during the workshop, including potential options for jointly engaging in EuroHPC funding opportunities

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[1] Icelandic HPC (IHPC) Community Web page, Online: https://ihpc.is/community/

- Strengthened informal networks and transfer of experiences and lessons learnt

Agenda (version 1)

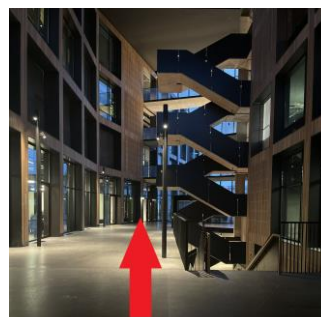| 5:00 – 5:15	Informal Welcome – Participant Introduction & Discussions *(Coffee/Tea/Refreshments, Snacks, and Sandwiches available)*	All
5:15 – 5:25	Welcome Address - 5th IHPC Workshop & Report from the EuroCC IHPC National Competence Center for HPC & AI	Prof. Dr. Morris Riedel (University of Iceland)
5:25 – 5:30	Q & A	All
5:30 – 5:40	Center of Remote Sensing in Iceland	Gro Birkefeldt Moller Pedersen (Center of Remote Sensing, HI)
5:40 – 5:45	Q & A	All
5:45 – 5:55	Updates from the Reykjavik Institute	Bill Patrowicz (CEO, Kaiser Global)
5:55 – 6:00	Q & A	All
6:00 – 6:10	Digital Europe/Horizon Europe	Hannes Ottóson (Rannís)
6:10 – 6:15	Q & A	All
6:15 – 6:25	Interactive HPC for Synthetic Data – A new workflow for distributed training	Dirk Norbert Helmrich, PhD Student(University of Iceland)
6:25 – 6:30	Q & A	All
6:30 – 6:40	Big Data Platforms on Kubernetes	Skeggi Thormar (NETAPP)
6:40 – 6:45	Q & A	All
6:45 – 7:00	Workshop Closing – Concluding remarks with next steps *(Coffee/Tea/Refreshments, Snacks, and Sandwiches available)*	All

Workshop Location
Address: Gróska, Bjargargötu 1, 102 Reykjavik, Iceland[2]
Entrance A, 1st Floor, Room Fenjamýri

Gróska Outside

Gróska 1st Floor

Online Event Information & Previous IHPC Events:
Check out our IHPC Community Web page, Online: https://ihpc.is/community/

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[2] Gróska Building in the Science park, Online: https://groska.is/en/home/

Workshop Organization:
Prof. Dr. -Ing. Morris Riedel, IHPC National Competence Center for HPC & AI (morris@hi.is)