



EuroHPC
Joint Undertaking



6th Icelandic HPC Community Workshop

Gróska, Bjargargötu 1, 102 Reykjavík – Entrance A, 1st Floor, Room Fenjamýri
31 August 2022 – 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

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



- Strengthened informal networks and transfer of experiences and lessons learnt

Agenda (version 2)

5:00 – 5:05	Informal Welcome – Participant Introduction & Discussions <i>(Coffee/Tea/Refreshments, Snacks, and Sandwiches available)</i>	All
5:05- 5:10	6th IHPC Workshop Opening Remarks	Prof. Dr. Jón Atli Benediktsson (University of Iceland)
5:10 – 5:15	Welcome Address - 6th IHPC Workshop & Report from the EuroCC IHPC National Competence Center for HPC & AI	Prof. Dr. – Ing. Morris Riedel (University of Iceland)
5:15 – 5:20	Q & A	All
5:20 – 5:35	Computational methods for a new combustion era - Numerical methods meet HPC	Dr. T. Grenga (RWTH Aachen University)
5:35 – 5:40	Q & A	All
5:40 – 5:55	Computational methods for a new combustion era - Data-driven modeling: challenges and perspectives	Mr. L. Nista (RWTH Aachen University)
5:55 – 6:00	Q & A	All
6:00 – 6:10	Update on the Reykjavík Institute	Bill Patrowicz (Founder Reykjavik Institute)
6:10– 6:15	Q & A	All
6:15 – 6:30	Reproducible Environments on Elja with Nix and Spack	Rohit Goswami, PhD Student (University of Iceland)
6:30 – 6:35	Q & A	All
6:35 – 6:45	European Digital Innovation Hub of Iceland (EDIH) will open this fall – How can we help?	Sverrir Geirdal & Einar Mantyla (AÚÐNA)
6:45 – 6:50	Q & A	All
6:50 – 7:00	Workshop Closing – Concluding remarks with next steps <i>(Coffee/Tea/Refreshments, Snacks, and Sandwiches available)</i>	All

Workshop Location

Address: Gróska, Bjargargötu 1, 102 Reykjavik, Iceland² Entrance A, 1st Floor, Room Fenjamýri

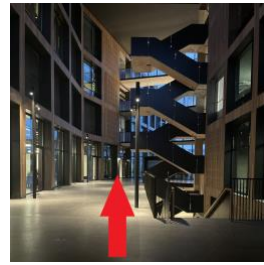
² Gróska Building in the Science park, Online: <https://groska.is/en/home/>



Gróska Outside



Gróska 1st Floor



Online Event Information & Previous IHPC Events:

Check out our IHPC Community Webpage, Online: <https://ihpc.is/community/>

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

