



EuroHPC  
Joint Undertaking



## 10<sup>th</sup> Icelandic HPC Community Workshop

Gróska, Bjargargötu 1, 102 Reykjavík – Entrance A, 1st Floor, Room Fenjamýri  
26 April 2023 – 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)<sup>1</sup>, 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

---

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



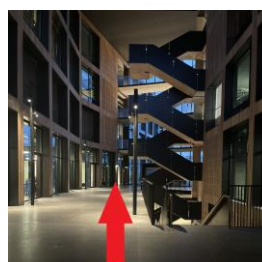
- Strengthened informal networks and transfer of experiences and lessons learnt

## Agenda (First version)

5:00 – 5:15	Informal Welcome – Participant Introduction & Discussions <i>(Coffee/Tea/Refreshments, Snacks, and Sandwiches available)</i>	All
5:15 – 5:20	Welcome Address - 10th IHPC-Workshop & Report from the EuroCC IHPC National Competence Center for HPC & AI.	Prof. Dr. – Ing. Morris Riedel (University of Iceland)
5:20 – 5:25	Q & A	All
5:25 – 5:35	Updates from the centre of remote sensing.	Gro Birkefeldt Moller Pedersen (University of Iceland)
5:35 – 5:40	Q & A	All
5:40 – 5:50	Usable Security.	Gerardo Reynaga (Cybersecurity Researcher)
5:50 – 5:55	Q & A	All
5:55– 6:10	Simplify AI on HPC with CoE RAISE Unique AI framework.	Prof. Dr. -Ing. Morris Riedel (University of Iceland)
6:10 – 6:15	Q & A	All
6:15 – 6:25	LAMEC API.	Jóhannes Nordal (University of Iceland)
6:25 – 6:30	Q & A	All
6:30 – 6:40	A deep learning-based MRI segmentation method for the brainstem and other deep brain structures.	Mengyu Li (University of Iceland)
6:40 – 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, Iceland<sup>2</sup> Entrance A, 1<sup>st</sup> Floor, Room Fenjamýri  
**Gróska Outside** **Gróska 1<sup>st</sup> Floor**



## Online Event Information & Previous IHPC Events:

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



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](mailto:morris@hi.is))

