

LUMI

A white wolf is the central focus, standing in a futuristic, blue-toned digital environment. The background is filled with vertical light beams, floating particles, and a grid-like pattern, creating a high-tech, cybernetic atmosphere. The wolf is looking slightly to the right of the camera.

Course introduction

Kurt Lust
LUMI User Support Team (LUST)
University of Antwerp

Welcome

- This course is organised by
 - The Belgian local organisation:
 - 4 governments together fund the Belgian participation in LUMI
 - Special thank you to FWO for this location and financial support for Flemish Tier-0 support and support of the VSC as a whole
 - Special thank you to the University of Antwerp
 - The LUMI User Support Team (LUST)
 - The LUMI HPE Center of Excellence: Vendor team working with LUST

Welcome

- Objectives of the course
- Practical organisation of this hybrid course
- How does the LUMI support organisation function?

Objectives of the course

- Learn about the LUMI hardware and software environment, as this environment may be different from what you're used to
 - Targets current users and potential users
 - This course is CPU-only but the basics are the same for the GPU nodes
- On-site: Networking with other users, LUMI staff and HPE staff
 - Your chance to ask hard questions off-line during the breaks
 - Your chance to be heard by LUST and HPE
 - We do have a break-out room downstairs where you can more easily discuss (rookkwarts/1.09)
 - On-line participants from Belgium: Feel free to come over tomorrow but bring your own lunch

On-site logistics

- Feel free to raise your hand for urgent questions, but keep the discussions for the discussion moments to avoid that the course becomes hard to follow for less experienced users
 - Please wait until someone comes with a microphone so that online participants can also hear the questions
- Simple coffee break, provided by FWO
- Sandwich lunch at noon
 - There is a mix of vegetarian and meat
- Slides and examples will be made available
 - See also <https://lumi-supercomputer.github.io/>
- Info about Brussels? Contact local LUMI staff, or talk to the Belgian participants!

Online logistics

- We may not be able to broadcast sound from Zoom in the lecture room during all presentations
 - Too much risk of sound feedback loops and annoying echo
 - Yet, please mute your mic to not disturb other Zoom participants
- For questions: Use the HedgeDoc (preferred) or the Zoom chat
 - A team of LUSTers and HPE people behind the scene will try to answer some of the questions there
 - A moderator will pass them to the room during Q&A moments
 - But direct interaction with the lecturer is harder than in a 100% online course
- Recorded for internal use, so feel free to switch off video

LUMI – a unique joint endeavor in high-performance computing

■ Countries which have signed the EuroHPC Declaration
■ LUMI Consortium countries

LUMI

CSC Datacenter in Kajaani

- **LUMI** is cofunded by EuroHPC (50%) and a consortium of 10 countries: Finland, Belgium, Czech Republic, Denmark, Estonia, Iceland, Norway, Poland, Sweden and Switzerland.
- **LUMI research infrastructure** provides a high-quality, cost-efficient and environmentally sustainable HPC ecosystem based on true European collaboration.
- The consortium continues a solid tradition of collaboration in HPC training and education, user support and data management services
- The resources of LUMI will be allocated per the investments
- Access via programs in consortium countries and a EuroHPC peer-review process available for all European researchers

Distributed support effort

- **Centralized virtual help desk** run by the distributed LUMI User Support Team
 - The model is based on a network of **dedicated HPC experts**
 - Each partner has a **1 FTE** representation (9 FTE total)
 - A very small team for the number of tasks that we have..
- **Level-3 support** mostly via local centers, EuroHPC Competence Centers, EuroHPC Centres of Excellence, HPE and AMD
 - For Flanders this will be provided by the VSC
- **National support**
 - for issues with allocations and most account issues
 - and for basic HPC training

What does LUST do?

LUST, a distributed team in charge of:

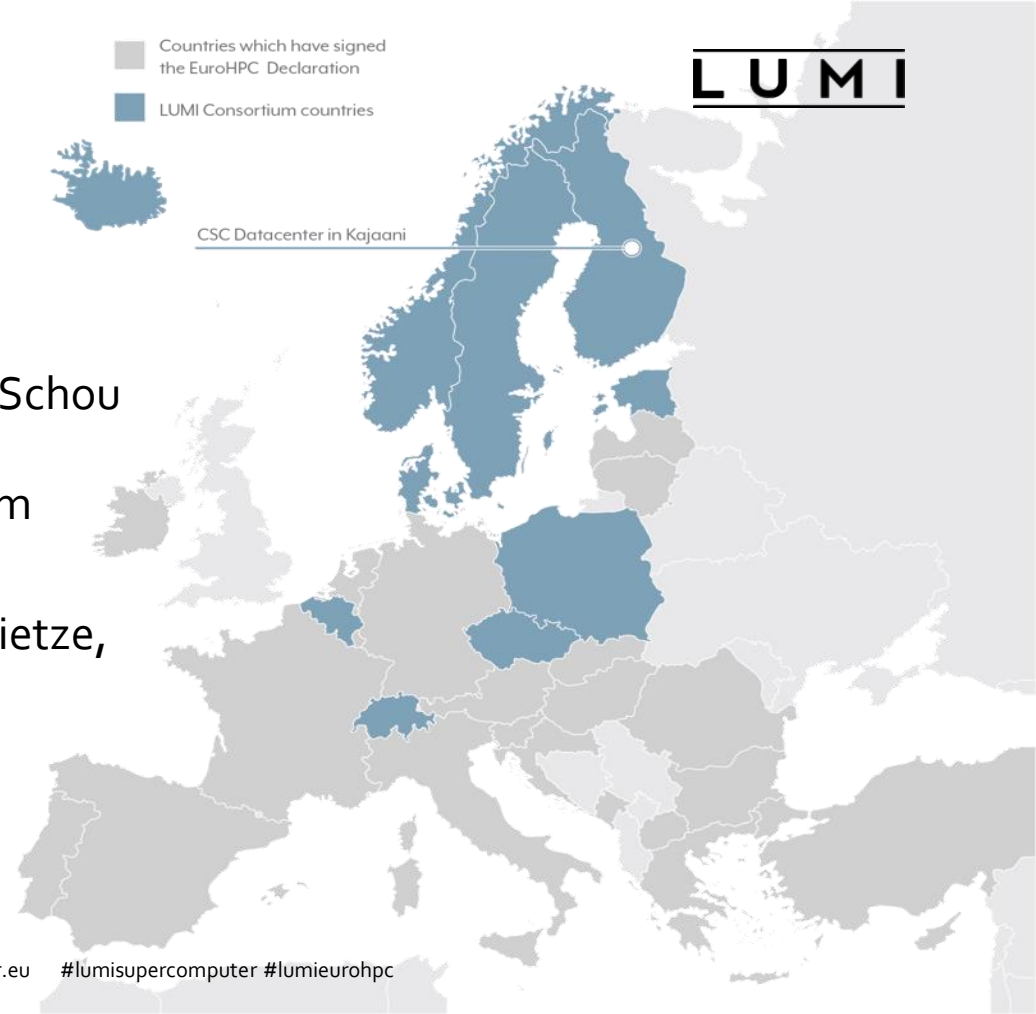
- Help desk from Monday through Friday (8:00 to 18:00 CET)
- Computational environment
- User documentation
- User training
- Some benchmarking, porting and optimization consultancy

■ Countries which have signed
the EuroHPC Declaration

■ LUMI Consortium countries

LUST members

- Belgium: Orian Louant, Kurt Lust
- Czech Republic: John Vicherek
- Denmark: René Jacobsen, Christian Schou Oxvig
- Estonia: Anders Martoja, Anne Vomm
- Finland: Emmanuel Ory
- Norway: Abdulrahman Azab, Jørn Dietze, Thomas Röblitz
- Poland: Maciej Szpindler
- Sweden: Peter Larsson
- Switzerland: Rafael Sarmiento



Some links

- User support <https://www.lumi-supercomputer.eu/user-support/>
- LUMI documentation <https://docs.lumi-supercomputer.eu/>
- Events and training <https://www.lumi-supercomputer.eu/events/>