

Welcome and Introduction

LUMI User Support Team (LUST)
University of Antwerp

June 2025



Aim of the course

- An introduction to working on LUMI for people who already have some HPC knowledge
 - You should have had some introductory HPC training in your local organisation. E.g., some familiarity with batch processing is expected
 - Neither do we have the team on-line to answer very technical questions about, e.g.,
 GPU programming on AMD either
 - 4/5-day trainings with 4-6 experts from HPE and AMD. On-site presence recommended (next one likely in the week of 03/03/2025 in Stockholm)
 - Monthly virtual user coffee break also offers some opportunities to get in touch with experts from HPE and AMD
- Know enough to know where to (not) look for more information
- More relaxed version of our previous 1-day course, with some new topics added (e.g., access via Open OnDemand, object storage and containers for AI)



Your trainers

- Emanuele Vitali: Working at CSC, partly in LUST but mostly for the EPICURE project
- Jorik van Kemenade: part-time LUST member from the Netherlands, working for SURF
- Kurt Lust: Full-time LUST member, University of Antwerp, Belgium.



Practicals

- There is a project for the course. This is only meant for making the exercises and not for your personal work.
- No questions via zoom, but you can write your questions in the HedgeDoc https://md.sigma2.no/lumi-intro-course-dec24#:
 - Questions are anonymous. But there is a limit to how much we can answer to such questions.
 - Please stay to the topic of the talk with your questions.
 The course is not meant to quickly give answers to all questions in the first hour after which you can leave.



HedgeDoc demo

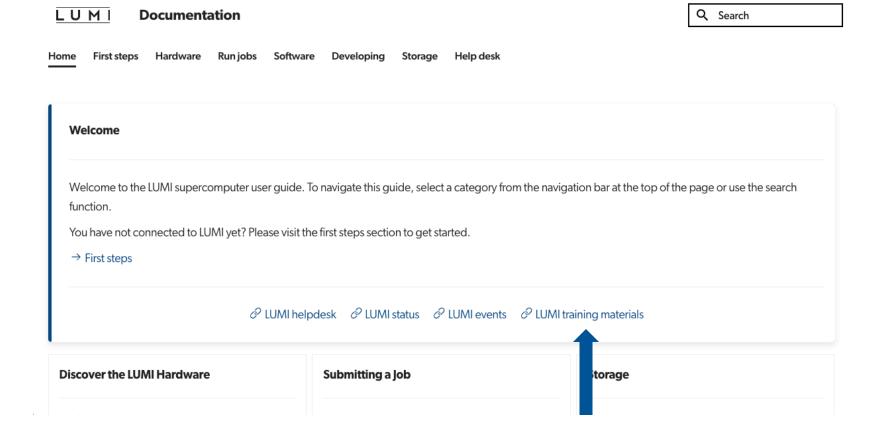


Practicals (2)

- Course materials will be made available in the <u>LUMI training materials</u> archive site at <u>lumi-supercomputer.github.io/LUMI-training-materials</u>.
 - Exercises during the course
 - PDF of the slides
 - Notes for some of the talks
 - Video recordings some time after the course (if they succeed)

docs.lumi-supercomputer.eu





Content



- Day 1: Building blocks before we can run
 - LUMI architecture
 - LUMI system software and programming environment
 - How do we offer and access application software?
 - How can we log on to the system and transfer data?
 - How to contact support?
- Day 2: 3 themes
 - Morning: Running jobs on LUMI
 - Afternoon:
 - Data on LUMI: Lustre and object storage
 - Containers on LUMI



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