LUMI User Support Team
LUMI will have a support team

Current **8 FTE** with “application expert” background
Each country nominates one person.

+ support from HPE Center of Excellence, **4 full-time experts**

- There will be a support portal on the web page:
  
  support@lumi-supercomputer.eu*

  * or similar looking, TBD

- Mondays-Fridays 08.00-18.00 CET

- You can ask for help just like you are used to when running on a SNIC supercomputing center.

- We will also write documentation for the system, and work **proactively** with support.

https://lumi-supercomputer.eu

Support will be here in the future
What we can help with

- **Installing software:**
  - Compilers, choosing flags, fixing errors
  - Finding the right library to speed up the computation
  - Smaller code fixes.

- **Troubleshooting:**
  - Why did my program crash?
  - Investigating numerical issues like instability and bad convergence

- **Best practice advice:**
  - How to use scientific software, which algorithms, best convergence parameters etc

- **HPC workflow / logistics:**
  - How to use the batch system
  - Moving and staging data and calculations.

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Please ask for help!

- The LUMI Support might have seen the same problem that you have 10 times before and we can solve it in 5 minutes.

- We are also interested in feedback. Annoyed about something? Tell us.
# How to start preparing

## Migration Path to LUMI

<table>
<thead>
<tr>
<th></th>
<th>Today</th>
<th>LUMI</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel Compilers</td>
<td>Cray PE, GCC, AOCC, clang</td>
<td></td>
<td>LUMI has AMD CPUs. Intel compilers may work, but not optimally. This includes Intel MKL library.</td>
</tr>
<tr>
<td>NVIDIA</td>
<td>AMD</td>
<td></td>
<td>HIP comes with tools that can convert CUDA code to HIP, but manual changes (≈25% of CUDA code) are still needed and new performance tuning.</td>
</tr>
<tr>
<td>CUDA C/C++</td>
<td>HIP C/C++</td>
<td></td>
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<tr>
<td>OpenACC</td>
<td>OpenMP (offload)</td>
<td></td>
<td>Unclear support, maybe only in Cray compilers?</td>
</tr>
<tr>
<td>OpenMP (offload)</td>
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<td></td>
<td>No problems! Note that OpenMP 4.5/5.0 not fully implemented in gcc yet.</td>
</tr>
<tr>
<td>OpenCL</td>
<td>OpenCL</td>
<td></td>
<td>AMD’s ROCm has OpenCL runtime.</td>
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If you have not run on a Cray supercomputer before, try to get access to one before. In Sweden, we have the *Beskow* system at PDC.