

PAX-HPC TRAINING EVENTS

Xu Guo, EPCC
x.guo@epcc.ed.ac.uk



PAX-HPC Training Events Organised by EPCC

- PAX-HPC training events so far
 - May 2023 - General training on Advanced MPI (RMA, Advanced Collectives, Optimisation) and OpenMP (Tasking, Memory Models, Offloading, Optimisation, Hybrid OpenMP+MPI), with trip to the ACF
 - October 2023 - Specialised CUDA/OpenACC Workshop (with consultancy and training on NVIDIA tools)
 - January 2024 – General training on GPU programming models (NVIDIA workshop, SYCL training) and Parallel I/O

Next General Training Event on 10 - 13 June in Edinburgh

- **Training Event:** PAX-HPC General Training on Performance Analysis and Debugging
- **Structure:**
 - 2-day training on performance analysis and debugging tools on ARCHER2/Cirrus
 - 2-day hackathon for attendees to work together on their codes using the tools, with individual hands-on advice from EPCC staff
- **Date:** 10 – 13 June 2024
- **Location:** Room G.03, Bayes Centre, The University of Edinburgh, 47 Potterrow, Edinburgh, EH8 9BT
- **Registration link:** <https://forms.office.com/e/arZ7CSbb8s?origin=IprLink>
- **Registration deadline:** 10 May 2024
 - *Early registration and travel arrangement is strongly recommended as Edinburgh will get busy in summer!*

Next General Training Event on 10 - 13 June in Edinburgh (Cont.)

- **Draft Agenda (TBC)**

- 13:30 – 17:00 Monday 10th June: Training on Linaro Forge
- 09:30 – 17:00 Tuesday 11th June: Training on HPE tools including CrayPat etc
- 09:30 – 17:00 Wednesday 12th June: Hackathon
- 09:30 – 16:00 Thursday 13th June: Hackathon
 - 15:00 – 16:00: Wrap-up with next training planning and requirements discussion
- Further details will be available before the training event

Discussion on training requirements

- Any particular contents to be included in the next training event in June?
- Any topics/requirements for the future PAX-HPC training events?
- Any suggestions for improvement on how we organise/run the PAX-HPC training events?
- ...

Feedback forms completed for last training event in January 2024

- Small number of completed feedback forms received but very helpful
- Comments/suggestions for improvements:
 - More time for each topic with on-hand practices
 - Trainees can be grouped, e.g. based on their main programming languages (C, C++, Fortran)
 - Follow-up (online) session for Q&A may be helpful
- Requirements for future trainings and/or information
 - In-depth training on CUDA and/or SYCL
 - Intermediate to advanced training on OpenACC and CUDA, in Fortran
 - Information on future national HPCs with GPUs
 - Memory management in Fortran/C
 - Performance analysis

ARCHER2 Training Courses

