

DiRAC TRAINING ACADEMY

Richard Regan, Training Manager

12th December 2023

The background of the slide features a blurred image of a person's hands typing on a laptop keyboard. The image is overlaid with a semi-transparent blue filter. The text "DIRAC TRAINING ACADEMY" is written in large, white, bold, sans-serif capital letters across the middle of the image.

DIRAC TRAINING ACADEMY

<https://dirac.ac.uk/training/>

- Comprehensive structured programme of training and support
- Academic- and industry-focused opportunities
- Instructor-led and self-paced format available
- In-person and remote events
- Advertised via All User email and on our social media platforms
- Fosters development of skills at all levels

Foundation HPC Skills Training Course

- Gateway to HPC focusing on key essential skills:
 - Unix Environment
 - Command Scripts
 - Version Control
 - Software Engineering
 - Testing and Code Scaling
- Run bi-annually in a remote taught-lecture + practical session format
- All material is available self-paced on our website





Introduction to SLURM

Best practices for running and managing SLURM jobs, the Linux module system and integration with job scripts

½ day taught + practical course in Q1 & Q3, and available self-paced on our website in Q1 2024

C/C++ Course

From variables and memory management through to advanced topics like object-orientated programming

2-week taught + practical course in Q3, and available self-paced on our website in Q1 2024

Intro. to MPI/OpenMP

Principles of parallel programming, basic MPI concepts, introduces OpenMP and a mixed-model approach

5-day taught + practical course in Q1 & Q3, and available self-paced on our website from Q1 2024

Advanced HPC Training

DiRAC



Performance & Profiling Analysis Workshop

Performance metrics collection and introduction to open-source tools to streamline analysis

Available as a collection of videos and workshop material on our website.



Debugging, Testing & Correctness Workshop

Includes proper bug finding strategies, compiler-based feedback and scalable debugging

Will be available on our website in self-paced format in Q1 2024



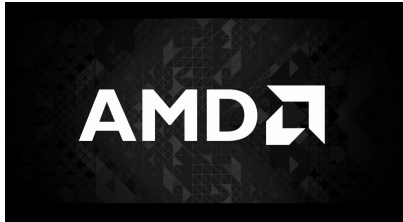
GPU Programming Workshop Series 2024

Overview of GPU architecture principles and different GPU programming approaches

Delivered Jan + Feb 2024
Registration open through our website

AI in the Age of Scientific Programming – Advisory Group looking at Test Driven Development – Training Materials coming late-2024

KU LEUVEN



AMD Hackathon: Getting Ready for MI300

- 13th-15th February: In-person in Durham
- **Pre-Training:** pm 30th January – 1st February: Remote



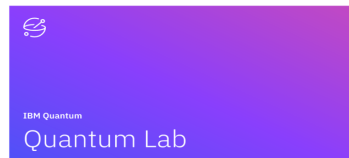
NVIDIA: N-Ways to GPU Training

- 11th April (TBC): Remote



INTEL Hackathon: oneAPI

- 7th - 9th of May (TBC): In-person in Edinburgh
- **Pre-Training:** 22nd - 24th April: Remote



DiRAC Innovation Placement Scheme

www.dirac.ac.uk/training

Thank You