

OpenACC programming for parallel accelerated supercomputers

Agenda

1st day

- 09:00-09:30 Registration
- 09:30-09:40 Welcome (by HLRS)
- 09:45-10:15 L1: Introduction and Overview of the Cray XK6 (30 min)
- 10:15-10:45 P1: Logging on, Compiling and running a first code (30 min)
- 10:45-11:00 *Break*
- 11:00-12:00 L2: Steps to create a hybrid code (60 min)
- 12:00-12:15 *Break*
- 12:15-13:00 P2: Understanding, profiling and scoping the MG code (45min)
- 13:00-14:00 *Lunch*
- 14:00-15:00 L3: Introduction to OpenACC (60 min)
- 15:00-15:15 *Break*
- 15:15-16:15 P3: Accelerating the MG code with OpenACC (60 min)
- 16:15-16:30 *Break*
- 16:30-17:00 L4: Performance tools for the Cray XK6 (30 min)
- 17:00-18:00 P4: Profiling and optimising the OpenACC MG code (60 min)

2nd day

- 09:00-09:30 Arrival, setup, discussions with lecturers
- 09:30-10:00 L5: Case study: the Himeno code (30 min)
- 10:10-10:30 L6: Case study: the Ludwig code (30 min)
- 10:30-10:45 *Break*
- 10:45-11:15 L7: Introduction to the Cray accelerated scientific libraries (30 min)
- 11:15-11:45 P7: Using the Cray accelerated scientific libraries (30 min)
- 11:45-12:00 *Break*
- 12:00-12:30 L8: Using other accelerated programming models on the Cray XK6 (30 min)
- 12:30-13:00 P8: Compiling and running examples of other programming models (30 min)
- 13:00-14:00 *Lunch*
- 14:00-15:00 Open forum: questions, feedback, discussion of exercises (60 min)
- 15:00-15:15 *Break*
- 15:15-15:45 L9: Future of OpenACC and summary (30 min)
- 15:45-16:00 Closing Session (by HLRS)

Lectures are labeled "L" and numbered sequentially.

Hands-on practicals are labeled "P" with the same number as their corresponding lecture.