OpenMP Programming Workshop @LRZ

The OpenMP *Common Core and Beyond*

Enabling HPC since 1997

lrz

appentra
make code parallel

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Expected workshop learning outcomes

- **Learn how to decompose real codes into parallel patterns**

    - Have experience decomposing the hydrodynamics code LULESH (from the CORAL benchmark suite) into parallel patterns

- **Learn how to parallelize real codes using OpenMP**

    - Have experience parallelizing the hydrodynamics code LULESH

    - Have a practical step-by-step approach based on patterns for parallelizing any code

- **Learn best practices for parallel programming using OpenMP**

Agenda

8:30 - 9:00	*Setup and welcome participants*
9:00 - 9:15	Overview
9:15 - 10:30	The OpenMP Common Core Decomposing code into patterns for parallelization Using Parallelware Trainer: A walk-through with PI example
10:30 - 11:00	Coffee
11:00 - 12:40	Practicals: Examples codes PI, MANDELBROT, HEAT and LULESHmk Worksheet: Parallelizing PI and LULESHmk with OpenMP
12:40 - 13:00	*Close*