



Welcome to OpenMP Training Series, Session 4: What could possibly go wrong with OpenMP



Helen He, NERSC
August 5, 2024

Sessions and Topics

- Session 1: OpenMP Introduction (May 6)
- Session 2: Tasking (Jun 10)
- Session 3: Optimization for NUMA and SIMD (Jul 8)
- **Session 4: What Could Possibly Go Wrong Using OpenMP (Aug 5, guest session from Ruud van der Pas)**
- Session 5: Introduction to Offloading with OpenMP (Sept 4)
- Session 6: Advanced OpenMP Offloading Topics (Oct 7)
- Session 7: Selected / Remaining Topics (Oct 28)

Links to slides, exercises, recordings of Sessions 1 and 2 available at
<https://www.nersc.gov/openmp-training-series-may-oct-2024/>

Introduction of Speaker Today

Dr. Ruud van der Pas

- Senior Principal Software Engineer in the Oracle Linux Engineering organization
- Deeply involved with the GNU gprofng profiling tool and the DTrace tracing tool, both for Linux
- Co-author on the book “Using OpenMP - Portable Shared Memory” and lead author on the book “Using OpenMP - The Next Step”, both published by MIT Press
- Regularly gives technical talks and tutorials at various events around the globe
- Very passionate about application performance, OpenMP and the combination

Some Logistics

- Users are muted upon joining Zoom due to large number of attendees
- Please change your name in Zoom session as “first_name last_name (nersc_user_name)”, such as “Helen He (yunhe)”
 - Click “Participants”, then “More” next to your name to rename
- You can click the CC button to toggle captions and view full transcript
- Trainings are recorded. Feel free to unmute and ask questions
 - If prefer not to record your voice, please type questions in Slack
- Slides have been uploaded. Recording to be available in a few days
 - <https://www.nersc.gov/openmp-training-series-may-oct-2024/>
- Please join [OpenMP-series-2024 Slack](#)
 - **#general**: Q&A and discussions
 - **#perlmutter-accounts**: training accounts issues
- Please take our [survey](#) to help us improve!