

Programming OpenMP

An Overview Of OpenMP

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History

- De-facto standard for Shared-Memory Parallelization.
- 1997: OpenMP 1.0 for FORTRAN
- 1998: OpenMP 1.0 for C and C++
- 1999: OpenMP 1.1 for FORTRAN
- 2000: OpenMP 2.0 for FORTRAN
- 2002: OpenMP 2.0 for C and C++
- 2005: OpenMP 2.5 now includes both programming languages.
- 05/2008: OpenMP 3.0
- 07/2011: OpenMP 3.1
- 07/2013: OpenMP 4.0
- 11/2015: OpenMP 4.5
- 11/2018: OpenMP 5.0
- 11/2020: OpenMP 5.1
- 11/2021: OpenMP 5.2

Released during SC24
in 11/2024: OpenMP 6.0



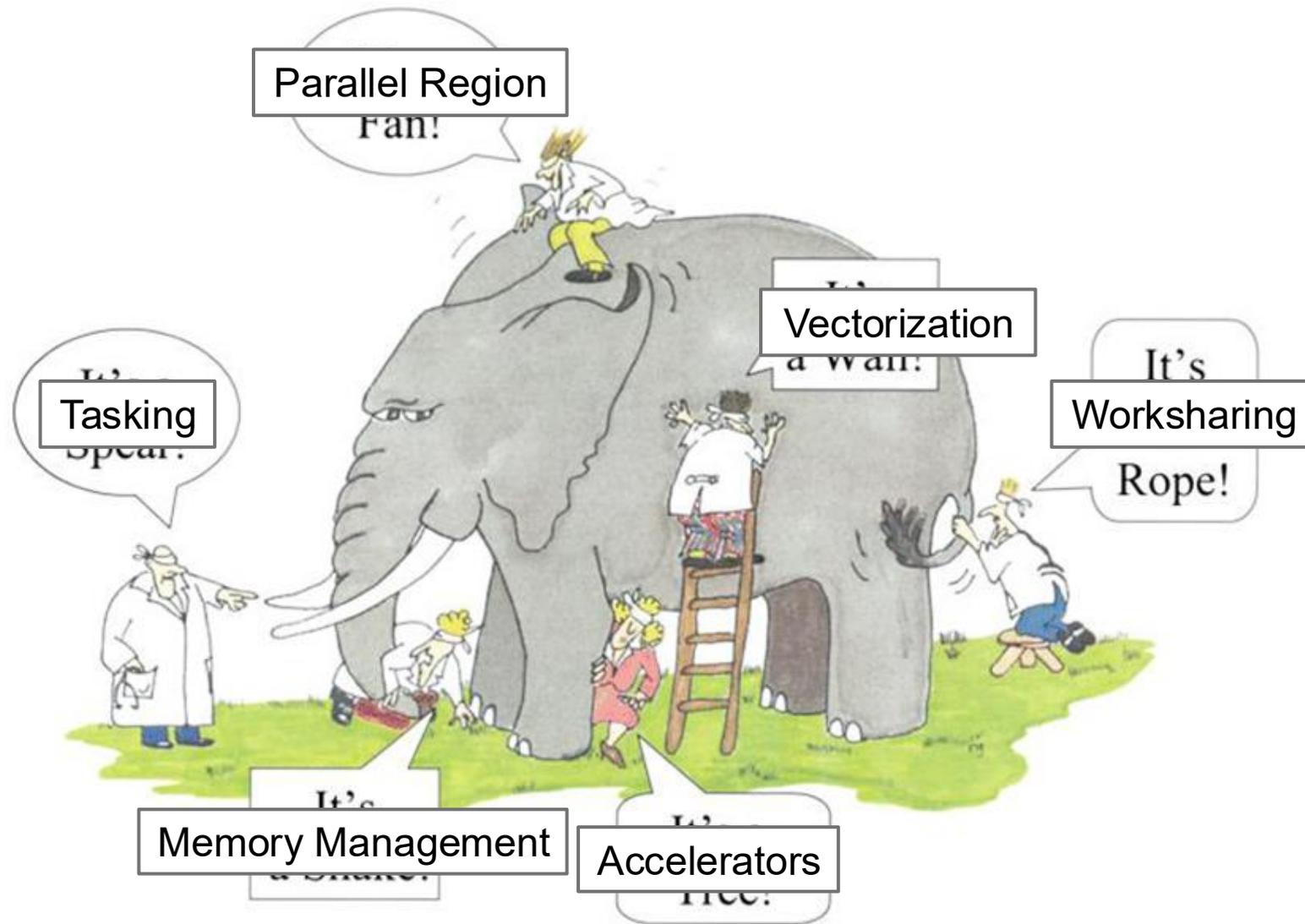
<http://www.OpenMP.org>

RWTH Aachen University is a member of the OpenMP Architecture Review Board (ARB) since 2006. Main topics:

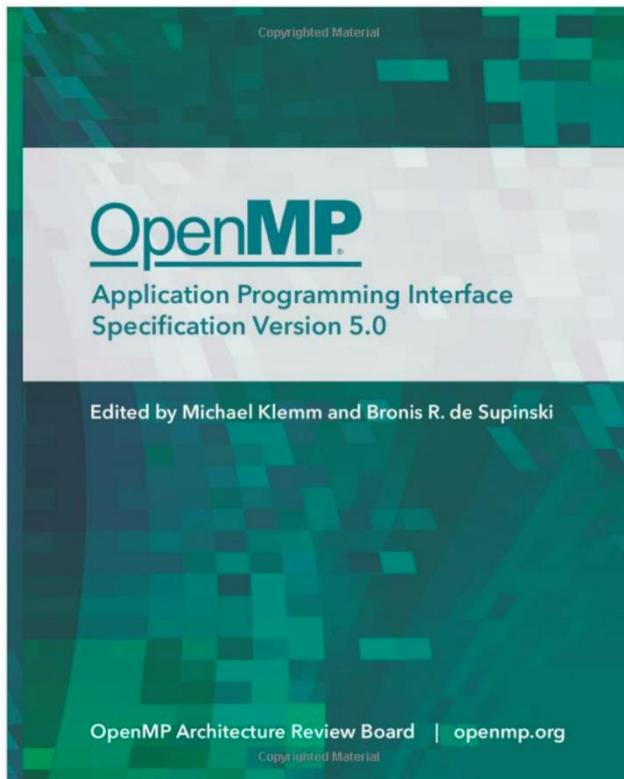
- Affinity
- Tasking
- Tool support
- Accelerator support

What is OpenMP?

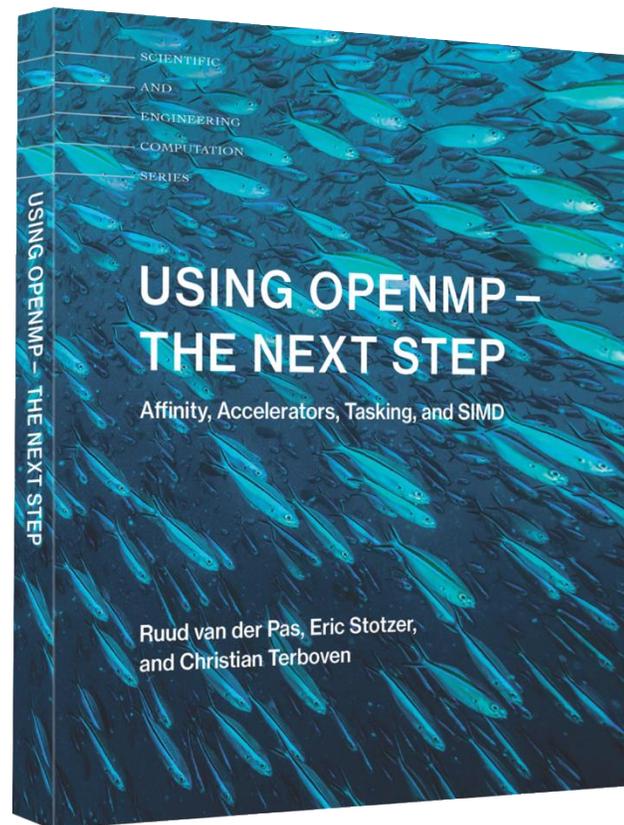
- Parallel Region & Worksharing
- Tasking
- SIMD / Vectorization
- Accelerator Programming
- Memory Management
- ...



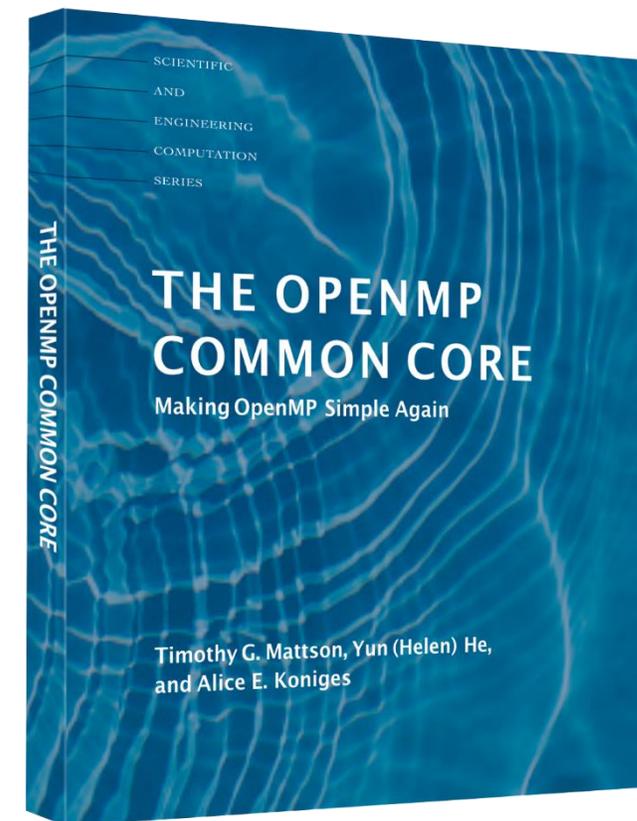
Recent Books About OpenMP



A printed copy of the 5.0 specifications, 2019



A book that covers all of the OpenMP 4.5 features, 2017



A new book about the OpenMP Common Core, 2019