










## 5-Day-Course — *Advanced* — 4th day (Thursday)

### Advanced OpenMP programming and MPI-2 parallel file I/O

- 8:30 **OpenMP – Cluster extensions** [20] (talk) 
- 8:50 **OpenMP – Tools** [21] (talk)  **all**
- 9:15 **OpenMP – Performance tuning and OpenMP** [22] (talk+practical) 
- 10:30 **Coffee**
- 10:45 **Parallel programming models on hybrid systems / MPI + OpenMP** [23] (talk)
- 12:00 **Lunch**  **old**
- 13:00 **MPI-2 parallel file I/O (basics)** [11+11a] (talk+practical) 
- 14:00 **Coffee**
- 14:15 **MPI-2 parallel file I/O (fileviews)** (talk+practical) 
- 15:15 **MPI-2 parallel file I/O (access methods)** (talk) 
- 15:45 **Coffee**
- 16:00 **Memory Checking & Single-Processor Optimization using Valgrind** [05b] (talk)
- 16:30 **Virtual reality based visualization** [30] (talk and online demo in the "cave")  
- 17:30 **End**














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## 5-Day-Course — *Advanced* — 5th day (Friday)

### Domain Decomposition and Load Balancing

- 8:30 **Domain decomposition of structured and unstructured grids** [31] (talk) 
- 9:30 **Coffee**
- 9:45 **Load balancing** [32+32a] (talk+practical) German:   English:  
- 11:00 **Numerical and parallel libraries** [33] (talk) 
- 11:20 **Parallel numerics (part1)** [34] (talk) 
- 12:00 **Lunch**
- 13:00 **Parallel numerics (part2)** (talk) 
- 13:45 **Coffee**
- 14:00 **Particle based domain decomposition** [35] (talk) 
- 14:45 **Coffee**
- 15:00 **Object oriented parallel programming with C++** [36] (talk) 
- 16:15 **Summary and Q&A** (talk+discussion) 
- 16:30 **End**



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1st  
day