



## Wrap Up

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# Conclusions

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## ● Vampir suite:

- Goal: performance optimization
- Focus: Visualization and guidance (very little automatic)
- Paradigms:
  - MPI, OpenMP, Pthreads, CUDA
- Upcoming:
  - Xeon Phi, OpenCL, Sampling-Tracing, ...

## ● MUST:

- Tool to detect MPI usage errors at runtime
- Scales well to 10,000 cores
- Idea: No false positives + Push button
- Flexible and deep checks (not just heuristics)

# Availability & Contact

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- Score-P: Open source
  - ⇒ <http://www.vi-hps.org/projects/score-p/>
- Vampir: LLNL/SNL/LANL have licenses
  - ⇒ <http://www.vampir.eu/>
- MUST: Open source
  - ⇒ <https://www.itc.rwth-aachen.de/must>
- VM with full installations available, contact us
- Contact:
  - {mueller, protze}@itc.rwth-aachen.de
  - tobias.hilbrich@tu-dresden.de

# Follow-Up

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- Do not hesitate to contact us
- LLNL on-site experts:
  - Joachim Protze (protze1@llnl.gov till Sept.)
  - David Boehme (boehme1@llnl.gov till 2017)
- Upcoming Score-P/Vampir/MUST tutorials:
  - EuroMPI 2014 tutorial:  
*„Practical Parallel Application Performance Engineering“*
  - SC’14 tutorial:  
*„Hands-On Practical Hybrid Parallel Application Performance Engineering“*
  - SC’14 tutorial:  
*„Efficient Parallel Debugging for MPI, Threads, and Beyond“*