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## **Application performance measurement towards Exascale using Score-P and Vampir**

### **Abstract**

**Tracing can provide very detailed information about the behavior of a parallel application. However, the huge amount of collected data also poses significant challenges. First, the overhead during the execution has to be limited and controlled. Second, the data has to be stored efficiently for later analysis. Finally, the data has to be processed and analyzed to understand the behavior of the parallel application and to find performance issues. This talk presents recent scalability improvements in the Score-P library for performance monitoring and the performance analysis tool Vampir.**

### **Biosketch**

Dr. Müller became the deputy director and CTO of the Centre for Information Services and High Performance Computing in Dresden, Germany in 2005. The center is part of the Gauss-Allianz responsible to provide HPC-services for researchers in Germany. In this position, he oversees the research activities related to HPC and is responsible for the end-user support in this area. Since 2006 he is vice-chair of the High Performance Group of the Standard Performance Evaluation Corporation (SPEC).

Prior to assuming his current position, Dr. Müller was the deputy director of the High Performance Computing Center (HLRS) in Stuttgart – one of the three federal HPC centers in Germany.

Dr. Müller holds a Dr. in physics from University Stuttgart, Germany. He is author or co-author of more than 70 peer-reviewed research papers.