

*Siegfried Benkner, University of Vienna, Austria*

***"Recent and Future Activities in High-Performance Computing and Scientific Data Management"***

In this talk we will provide an overview of recent and future activities at the Scientific Computing Research Group at the University of Vienna. Over the past 20 years the group has been working in the area of programming models and tools for parallel systems, with a recent focus on high-level programming approaches, runtime systems and automatic performance tuning for heterogeneous parallel systems. Another current strand of research is in the area of scientific data management where the group has developed a Cloud-based service infrastructure for accessing and integrating heterogeneous distributed data sources targeting Life Sciences applications. With the aim of bringing together Big Compute and Big Data, a future research focus is on adaptive execution strategies for real-time data analytics applications on current and emerging parallel systems.



**Siegfried Benkner** is a professor of Computer Science and the head of the Scientific Computing Research Group at the University of Vienna, Austria. His research interests include parallel and distributed computing, service-oriented software architectures, Grid and Cloud computing as well as languages, compilers and runtime systems for parallel and distributed systems. A major current research focuses is on programming support for heterogeneous many-core systems. Recently, Benkner's group coordinated the European PEPHER Project (Programmability and Performance Portability of Heterogeneous Many-Core Systems) and was involved in the European Autotune project (Automatic Online Tuning) and VPH-Share projects (Sharing for the Virtual Physiological Human). Siegfried was involved in the organization of several international conferences and was program chair of ICPP 2009 and EuroMPI 2012. Siegfried Benkner has published more than 100 peer-reviewed publications and is a member of the ACM, the IEEE, and the HiPEAC Network of Excellence.