

# Supercomputer at the University of Innsbruck

Fact Sheet July 2015



## LEO3 • LEO3e

LEO3 and its latest extension LEO3e (regular operation planned for August 2015) form the corner stones of our University's supercomputing resources. These cluster computers are used by 250 scientists from 30 departments.

**LEO3: 2000 cores, 18 TFLOPs Performance, 4 Terabyte RAM, 40 Gbit/s Infiniband, 61 Terabyte Scratch Storage, 3 GPU Nodes**



**LEO3e: 900 cores, 28 TFLOP Performance, 3.7 Terabyte RAM (including 2 compute nodes with 512 GB each), 56 Gbit/s Infiniband, 54 Terabyte Scratch Storage**

**Software** A large portfolio of standard HPC software products is offered: mathematical and scientific programs and libraries, data visualization tools, development tools etc.

**Infrastructure** In the background we have a solid IT infrastructure that guarantees robust supercomputing operations: a 10 Gbit/s connection to the Austrian Academic Network ACOnet, the University's City Area Network, a flexibly scalable storage and backup infrastructure at the ZID.



## Mach

Mach is a joint project of the University of Linz and the University of Innsbruck. With the Mach computer (SGI Ultraviolet) we have a large shared-memory system that enables particularly memory-intensive applications.

**Mach: 2000 cores, 21 TFLOPS Performance, 16 Terabyte RAM, 120 Gbit/s NUMALink, 58 Terabyte Scratch Storage**



## LCC2 (starting autumn 2015)

The LCC2 system (Linux Compute Cluster) is dedicated to education. Conceptually, a full-fledged HPC system has been assembled from reused components. With this system, our students can "play" and try out supercomputing without the risk of disrupting important scientific calculations.

**LCC2: 500 cores, 4 TFLOPS Performance, 1.8 Terabyte RAM, 20 Gbit/s Infiniband, 30 Terabyte Scratch Storage**



## HPC Team

The ZID (Zentraler Informatikdienst) is the reliable service provider and partner of scientific computing at the Universität Innsbruck. The HPC-Team consists of 5 IT experts and architects who design and maintain the supercomputer resources and support our HPC users. The entire ZID is available to our supercomputing community with well-established services such as network, storage, and backup.