



ANTRITTSVORLESUNG

Univ.-Prof. Dr. Volker Strumpen
(Institut für Computer Architektur)



Professor Volker Strumpen succeeds Professor Jens Volkert, head of the Institute for Graphics and Parallel Processing at JKU. He received a Diploma in Electrical Engineering from RWTH Aachen and a PhD in Computer Science from ETH Zürich in 1995. He served in various academic positions at MIT, Yale University, and the University of Iowa, where he participated in several research projects including Porch – the portable checkpoint compiler, Cilk – an algorithmic multithreaded programming language, and Raw – a single-chip 16-processor architecture. Earlier, he designed several award-winning systems for large-scale parallel distributed computing in workstation networks and the internet. Before joining JKU, Professor Strumpen was a Research Staff Member at IBM's Austin Research Laboratory. Prior to that he helped starting up Akamai Technologies and built the prototype of the routing technology that led to Akamai spin-off Sockeye Networks, which has been acquired by Internap. He also spent some time working on semiconductor technology at Sony.

Montag, 31. Mai 2010, 16:00 Uhr¹

Repräsentationsräume der JKU, 1. Stock (Uni-Center)

Quo Vadis, Computer Architecture?

In 2005 the exponential performance increase of microprocessors has come to a screeching halt. The reason is the heat generated at clock frequencies above 5 GHz, which cannot be dissipated economically from the surface of a microchip. Although VLSI technology offers another two or three generations of miniaturization, the year 2005 marks the end of three decades of frequency scaling. For another decade, Moore's Law, the doubling of transistors on a chip every two years, is expected to continue. The industry has responded by introducing multicore and manycore architectures on a chip. Translating the associated increase in peak performance into practical performance improvements requires parallel programming. Professor Strumpen will review the trends and challenges ahead of us, and outline the research directions he plans to pursue at the newly formed Institute for Computer Architecture.

¹ Zu diesem Termin findet zuerst die Antrittsvorlesung von Herrn Prof. Bimber und anschließend jene von Herrn Prof. Strumpen statt.