Colorado State University's Information Science and Technology Center (ISTeC)

Presents <u>two</u> lectures by

Dr. Wolfgang Gentzsch

MCNC Grid Computing & Networking Services

ISTeC Distinguished Lecture

in conjunction with the Computer Science Seminar Series

"Grid Computing, the Next Big Thing?"

Monday, March 21, 2005

4:10 pm to 5:00 pm, Lory Student Center 203

Reception prior at 3:30 pm

and

Special School of Education, Electrical and
Computer Engineering Department and
Computer Science Department Seminar

sponsored by ISTeC

"A Grid Software Stack"

Tuesday, March 22, 2005

11:00 am to 12:00 pm, Lory Student Center 214

ABSTRACTS

"**Grid Computing, the next Big Thing?**"
Grid Computing is the next big thing; at least according to many articles in recent newspapers and magazines, and in the opinion of the IT vendor community. In this presentation, we will briefly introduce the concept of Grid Computing, underline the importance of the network, analyze the current status of grid technology and implementation, and what's real and what's hype. We will then present MCNC's grid strategy, the NC Statewide Grid, MCNC's grid computing and networking services and projects, and conclude with an outlook into the future.

"**A Grid Software Stack**"
Recently, the grid community is focusing on designing and implementing real production grids, within the enterprise as well as so-called community grids for virtual organizations. In this presentation, we will discuss examples of integrated software stacks for these two classes of grids, consisting of portal software, Globus Toolkit 4, and the Grid Engine distributed resource management system. We also present case studies for real production grids based on this software.

Dr. Wolfgang Gentzsch
Dr. Gentzsch is the managing director of MCNC Grid Computing & Networking Services, a member of the MCNC family of companies. After leading global grid technology development at Sun Microsystems, Dr. Gentzsch joined MCNC in April 2004 with more than 25 years of experience in grid computing, software development, computational engineering, computer architecture, and teaching.

At MCNC, Dr. Gentzsch directs the organization's grid strategy and technology development, including the development of one of the nation's first statewide research and education grids. Prior to joining MCNC, Dr. Gentzsch became senior director of grid computing for Sun Microsystems. He was responsible for Sun's grid computing vision, strategy and technology development. Dr. Gentzsch joined Sun in 2000 when it acquired GRIDWARE, a distributed computing software company that he co-founded in 1999. Gridware's technology is the foundation for the Sun Grid Engine, the world's leading distributed resource management software used in over 10,000 departmental and enterprise grids worldwide. Sun Grid Engine was a finalist at LinuxWorld 2002, earned the Excellence in Cluster Technology Award at ClusterWorld 2003, and was honored with the Frost & Sullivan Excellence in Technology Award in 2004.

Dr. Gentzsch was also a professor of mathematics and computer science at the University of Applied Sciences in Regensburg, Germany, and served as the head of computational fluid dynamics and supercomputing at the German Agency for Aerospace and Aeronautics. Throughout his career, industry leaders including IBM, Cray Computers and Digital Equipment Corporation have sought his consulting skills on distributed computing and supercomputing projects.

He is a widely published author of more than 150 articles about computer science, numerical algorithms, engineering applications, and grid computing, and he has spoken extensively at conferences around the world. He is an adjunct professor at Duke University, North Carolina State University, and the University of North Carolina at Charlotte.

Host: To arrange a meeting with the speaker, please contact Dr. Michael De Miranda at (970) 491-5805 or mdemira@CAHS.colostate.edu.

Information Science and Technology Center (ISTeC)

ISTeC (Information Science and Technology Center) is a university-wide organization for promoting, facilitating, and enhancing CSU's research, education, and outreach activities pertaining to the design and innovative application of computer, communication, and information systems. For more information please see ISTeC.ColoState.edu.