



EINLADUNG  
zum  
**ZHR - KOLLOQUIUM**

**Titel:**           **PLANETLAB: DISTRIBUTED TESTBED FOR RUNNING  
SIMULATIONS OF COMPLEX SYSTEMS**

**Referent:**       **Gian Paolo Jesi  
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**Kurzfassung:**

The *Planetlab project*, with a collection of about 440 machines hosted all over the world, develops a planetary-scale distributed testbed to build, deploy, and test peer to peer distributed systems and simultaneously verify their behaviors and emergent properties. This facility gives the chance to perform large-scale simulations involving a huge number of participants. The solution scales well in terms of the number of agents involved in the environment; however new challenging problems arise: the fact of being distributed adds complexity in many areas such as monitoring and management features and in dealing with transient/non transient errors.

The talk describes the Planetlab testbed approach, - the possibilities it is opening for large-scale distributed computer simulations and the new problems arising due to this. The talk details the whole Planetlab developmental life cycle, ranging from the account creation to the simulation run and result collection. Also other similar solutions will be briefly discussed (such as Modelnet and Emulab) to highlight the main approach differences.

**Ort:**               **Willers-Bau C 207**  
**Zeit:**             **Donnerstag, den 18. November 2004, 11.00 Uhr**

gez. Prof. Dr. Wolfgang E. Nagel