

## **„Gießener Abendgespräche Kognition und Gehirn“**

Mittwochs, 18 bis 20 Uhr, Raum: F9

**17.06.09      Petra Ahrweiler (Universität Dublin)**

"Simulating innovation networks"

### **Abstract:**

„In the first part of this talk, an agent-based model of innovation dynamics in knowledge-intensive industries such as the biotechnology-based pharmaceuticals will be described. The SKIN model (Simulating Knowledge Dynamics in Innovation Networks) allows the representation of heterogeneous agents that have individual and varying stocks of knowledge. The simulation is able to model uncertainty, historical change, effect of failure on the agent population, and agent learning from experience, from individual research and from partners and collaborators. The interactions between the agents occur on two levels: through a market with firms supplying and consuming goods for a price, and through the exchange of knowledge. Since in the meantime extensions of SKIN are used for innovation policy modelling at various scales (sectoral, regional, national and European innovation systems), the second part of this talk will introduce a few of the past and current applications, e.g. using the model for simulating the R&D project networks which arose under Framework Programmes of the European Commission (NEMO), or using the model to investigate the role of science-industry links for innovation performance and economic benefits. “