

**Sommersemester 2009**

# BayCEER Kolloquium

**Vortragsreihe Ökologie und Umweltforschung****Donnerstag 14.05.2009, 16:15 Uhr, H6****Anschließend Postkolloquium mit Bier und Brezeln im Foyer H6**

## Prof. Dr. Thomas Koellner

Ecological Services (PES), University of Bayreuth

# Ecosystem Services in Human- Environment Systems

The adaptive management of ecosystem services requires knowledge about the interdependence of land use decision-making and the ecosystem features in a given landscape; and how this coupled human-environment system is influenced by drivers of global change. The problem in this context is, that both decision-making processes and the ecosystem changes are subject to large uncertainties and incomplete information.

For a case study in a Costa Rican watershed, we develop a spatially explicit Bayesian network linking ecological and socio-economic information. This type of model should be useful to plan and simulate new policy measures like payments for ecosystem services, because it simultaneously takes the ecosystem, socio-economic system and the policy system into account. The model allows identifying management units with high and low values for hydrological ecosystem services and thus the targeting of available financial funds can be optimized.

First working steps show that such a BN provides a robust modeling environment, useful for better informed and participatory decision-making.

Die Vortragsreihe ist eine interdisziplinäre Plattform zur Information und Diskussion für Studierende, Forschende und Lehrende

Gäste sind herzlich willkommen