



Bayreuther Zentrum für Ökologie und Umweltforschung

Bayceer

Do. / Thu. 17 st Gebäude / Building NW I Hörsaal / Lect. hall H12 Sommersemester / Summer Term 2012

BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung Lectures in Ecology and Environmental Research

Donnerstag 11.07.2013, 17:00 Uhr, H12 Anschließend Postkolloquium mit Bier und Brezeln im Foyer H12

Dr. Benjamin Gilfedder

Department of Hydrology, University of Bayreuth

Groundwater - surface water interactions - high resolution measurements for tracing transient events

River and groundwater resources are often considered, and managed, as separate commodities. However, there is significant connection between these reservoirs which is important for water fluxes and water quality. Groundwater discharge to rivers is vital for maintaining river flow in dry periods and rivers can recharge groundwater systems either at high flow or when groundwater levels are below river levels. But how do we quantify this exchange and how dynamic is this interface? In this talk I will show how high resolution measurements of ²²²Rn and EC can be used to really understand driving forces behind groundwater surface water exchange during transient events such as storms. I will focus on an Australian wetland as an example of a gaining system and changes in river stage to illustrate transient storage in river banks. Overall the talk will focus the importance of groundwater - surface water on exchange, how this is not stationary in time due to transient processes, and how we needed continuous methods to really understand fluxes.

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

> Gäste sind herzlich willkommen

The lectures serve as an interdisciplinary platform for students, junior and senior scientists.

> Guests are cordially invited!