

Wintersemester / *Winter Term 2014/15*

## BayCEER Kolloquium

Vortragsreihe Ökologie und Umweltforschung  
*Lecture series in Ecology and Environmental Research***Donnerstag 9. 10. 2014, 12:00 Uhr, H6**

Anschließend Postkolloquium mit Mittagsimbiss im Foyer H6

### Prof. Hiroyuki Muraoka

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## Open-field warming experiments in a mature deciduous broadleaf forest at Takayama, Japan

Prediction of the changes in carbon balance in forest ecosystems under climate change is one of the urgent and challenging researches in environmental sciences. To achieve better prediction of the possible impacts of the global warming on forest carbon balance, ecophysiological understandings on photosynthetic carbon gain and respiratory carbon release should be gained. In a cool-temperate deciduous broadleaf forest in 'Takayama' site (AsiaFlux, JaLTER), located on a mountainous landscape in central Japan, multidisciplinary research on forest carbon balance is taking place, including micrometeorological measurements of CO<sub>2</sub> flux, ecological processes of tree growth and soil carbon sequestration, leaf ecophysiological research on canopy photosynthesis and phenology, their integration by model analysis, and in situ and satellite remote sensing of canopy photosynthetic productivity by combining canopy ecophysiological and optical measurements. In this talk results of an open-field warming experiment for foliage on a canopy tree species and for soil are presented.

Do. / *Thu.* 12 st  
Gebäude/*Building*  
GEO  
Hörsaal/*Lecture hall*  
H6Die Vortragsreihe  
ist eine  
interdisziplinäre  
Plattform zur  
Information und  
Diskussion für  
Studierende,  
Forschende und  
LehrendeGäste  
sind herzlich  
willkommen*The lecture series  
serves as an  
inter-disciplinary  
platform for  
students, junior  
and senior  
scientists.**Guests  
are cordially  
invited!*