

BayCEER Kolloquium

Lectures in Ecology and
Environmental Research

WS 2016/17



UNIVERSITÄT
BAYREUTH

Wednesday

08.03.2017

13:30 in H 36, NW III

Prof. Dr. David Storch

Department of Ecology / Center for
Theoretical Study, Charles University &
Czech Academy of Sciences, Prague

Biodiversity scaling: between biology and geometry

Scaling relationships represent the most universal patterns in ecology, and potentially provide insight into underlying biological processes. However, they are at the same time often constrained by the rules of geometry, which may mask biologically relevant features of the study system. I will show how simple geometrical reasoning can be used for recovering the shape of the species-area relationship, a major biodiversity pattern, which is also by particular geometrical relationships linked to many other patterns including the trends in beta-diversity, the relationship between productivity and species richness, as well as patterns in species geographical ranges.