

Institut für Ökologie, Evolution und Diversität & RobustNature Exzellenzcluster-Initiative



EINLADUNG

Kolloquium Sommersemester 2022

Dr. Joscha Beninde

Institute of the Environment and Sustainability University of California, Los Angeles

hält am Dienstag, den **20.09.2022**, um 16:15 Uhr, <u>digital via Zoom</u>, einen Vortrag über

"Impacts of global change on the genetic diversity and differentiation across taxa"



The interplay of humans and biodiversity requires strategies that ensure the long-term persistence of all species. Anthropogenic changes in land use and climate alter species local abundances and landscape-level connectivity of populations, directly impacting patterns of genetic diversity and differentiation but effects are known to vary in strength across species and taxonomic groups. Using spatially explicit models of large scale, macrogenetic datasets my research develops further and synthesizes our understanding of genetic responses to these anthropogenic changes across species.

In this talk I will focus on the CaliPopGen dataset, which summarizes the population genetic literature of over 400 species in California, and a dataset utilizing RAD-sequencing of 20 species at the urban-wildland interface in Greater Los Angeles. These datasets are uniquely suited to disentangle the effects of land use and climate from effects of life-history strategies and native status

on population genetic patterns. I will further highlight the benefits of resistance-based optimizations, the integration of habitat suitability modelling, and the role of different genetic distance metrics on robust inferences of genetic connectivity. Jointly, these approaches allow to identify optimal spatial solutions for conservation planning under various projections of future changes in climate and land use.

Einladende: Jun.-Prof. Dr. Lisa M. Schulte

Dieser Vortrag findet lediglich in <u>Digitaler Form</u> statt. Über diesen Link kommen Sie zu der entsprechenden Veranstaltung:



https://uni-frankfurt.zoom.us/i/65372822827?pwd=OXBKMIV0Q1hQWmt1THhBNk1RQnRTZz09