



**PARIS
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Environment and Biodiversity



Guest Lecture

Seminar Series

Environment and Biodiversity

Univ.-Prof. Dr. Konrad Fiedler

University of Vienna

Dept. of Botany & Biodiversity Research

Host: Univ.-Prof. Dr. Jan Christian Habel

Macro-ecology of European Lepidoptera: the value of placing species trait information in the light of phylogenies

Thanks to technological progress, DNA sequence information continues to accumulate near exponentially for multiple insect species. This allows for ever better resolved phylogenetic hypotheses to be formulated. At the same time, over 250 years of collecting natural history data since Linnean times has resulted in a globally unrivalled amount of trait information in groups such as moths and butterflies which attract particular interest among (citizen) scientists in Europe. Though still remarkably incomplete, these bodies of evidence now can be combined to explore eco-evolutionary contingencies between species traits. Using butterflies and the two moth families Geometridae and Erebidae as examples, I report on contingencies between traits like body size, voltinism, larval feeding strategy, diurnal activity rhythm and distributional range size. Most of these traits reveal substantial phylogenetic inertia, emphasizing the need for phylogenetically controlled ways to analyse them in a comparative framework. While some patterns initially formulated in early studies without phylogeny control were corroborated, others had to be revised or even refuted in the light of phylogenetic information.

Vortragssprache: Englisch

Friday, May 23, 2 PM

NLW-Faculty, Room 413, 1st floor




SCAN ME