Online or in person

Behaviour & Evolution Seminars

Summer Semester 2023/2024

On Wednesdays, online or in the room W0-135

12:15h

Zoom information for SoSe2324:
https://uni-bielefeld.zoom-x.de/j/68076185866?pwd=RnZOYTE1Uit-vaGhselB3bERRVEZMZz09

Meeting ID: 680 7618 5866
Passcode: 127983

Date	Speaker	Version	Title + Abstract
10.04	Alfredo Sánchez-Tójar [Bielefeld University] (Host: me)	In-person	**Title:** Are meta-analyses worth the hassle? TL;DR: It depends **Abstract:** With an ever-growing number of scientific articles published each year, evidence syntheses, especially meta-analyses, are becoming essential to understand and summarize scientific development, and thus, to inform future research and policies. However, **meta-analyses rarely constitute the endpoints of scientific debates** and in fact, most meta-analyses are of low quality and poorly interpreted. Drawing from my own ecological and evolutionary biology meta-analyses, in this talk, I plan to provide a general introduction to meta-analysis with a special focus on **how to read/conduct and interpret meta-analyses in the light of heterogeneity and publication bias**, and most importantly how to identify the good, the bad, and the ugly. Join me in exploring fascinating unknown territories and level up your game! If you feel like, bring your favourite recent meta-analysis with you and test your meta-bingo skills!
17.04	Ettore Camerlenghi, Bielefeld University (Host: Maraci)	In-person	Title: The Multilevel Society of a Cooperatively Breeding Songbird Abstract: Multilevel societies are considered to be the most complex social structures found in vertebrates. They have been observed in primates, cetaceans, ungulates, and elephants but the drivers linked to their emergence as well as the benefits that they offer are not yet clear. However, recent studies have suggested that birds might provide excellent opportunities to fill this theoretical gap. During my PhD, I first described the theoretical link between cooperative breeding and the potential emergence of multilevel societies across Australian and New Zealand bird species. I then analysed non-breeding social networks of cooperatively breeding superb fairy-wrens (Malurus cyaneus) to reveal their structured multilevel society. Using an experimental framework, I demonstrated how individual superb fairy-wrens can adjust cooperative behaviour toward other individuals according to their relative social position in the multilevel society. Further, I showed how cooperative behaviour varies with seasonal changes in envi-

			ronmental condition, and I suggested that the benefits linked to cooperative behaviour are likely to drive the emergence of upper social units in the superb-fairy wren multilevel society during harsh environmental conditions. My research highlights the potential that birds offer to better understand patterns and processes linked to the evolution of multilevel societies and suggests new research avenues in the study of social behaviour of birds.
24.04	Daniel Berner [University of Basel] (Host: Sánchez-Tójar)	Online	**Title**: Joining the paradigm shift from significance testing to estimation statistics **Abstract**: Null hypothesis testing and statistical significance are still omnipresent in scientific data analysis and reporting, although this methodological paradigm has been demonstrated to be damaging to science. As the problems associated with null hypothesis significance testing are poorly recognized by researchers in ecology and evolution, I here provide an overview of the issues and make suggestions how our practice of analyzing and especially reporting research can be improved.
08.05	(Host: Damas Moreira/Camerlenghi)		TBA
15.05	(Host: Wittmann)		TBA
22.05	Alexandre Palaoro [Federal University of Paraná] (Host: Segovia)	Online	**Title** The rise and fall of animal weapons **Abstract**: Horns, tusks, spines, claws, jaws, legs shaped like nut crackers; the diversity of shapes and sizes of the structures animals use to combat each other is seemingly endless. The species that bear such structures are also diverse, spanning both invertebrates and vertebrates. But how do we get to that diversity? Can fighting alone be responsible for such a huge diversity? To tackle this type of question, we need to deconstruct evolution into the steps a trait goes through during their evolutionary process, namely origin, maintenance, diversification, and eventual loss of the trait. In this talk, I will focus on the mechanisms that can trigger the origin and the loss of animal weapons. Later, I will show some examples of how biomechanics might help us to understand the diversification process. By the end of the talk, I hope you have a new idea of how weapons rise and fall across the evolutionary history of animals
29.05	(Host: Reinhold)		
05.06	Liliya Doronina, University of Münster (Host: Caspers)	TBA	TBA
12.06	Laurent Lehmann University of Lausanne (Host: Orlova)	In-person	**Title:** The evolution of environmentally mediated social interactions and posthumous spite under isolation by distance

19.06	(Host: Krüger/Chakarov)		TBA
26.06	(Host: Barauh/Nabu-tanyi)		TBA
03.07	(Host: Hoffman)		TBA
10.07	David F. Westneat, University of Kentucky (Host: Meuthen)	Online, **14:15!**	TBA
17.07	Nicholas Jones University of Bayreuth (Host: Kraus)	In-person	**Title:** Measuring and testing cognitive styles hypothesis

All interested are welcome!

Questions or comments?

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