

Deutsches Treffen für Fledermausforschung 2020



Bild: Sönke von den Berg

10. bis 12. Januar 2020
Frauenwörth



Dear colleagues and guests!

It is our great pleasure to welcome you at the Benedictine Abbey Frauenwörth for the German Bat Meeting 2020.

The organizing committee

*Research group Acoustic and Functional Ecology
Max Planck Institute for Ornithology, Seewiesen*

Holger Goerlitz

Thejasvi Beleyur

Nicole Drenkard

Léna de Framond-Benard

Antoniya Hubancheva

Theresa Hügel

Neetash Mysuru

Chair of Zoology

Technical University Munich, Freising

Uwe Firzlaff

Leonie Baier

Stephen Hörpel

Jan Pastyrik

Department Neurobiology

Ludwig Maximilians University, Martinsried

Lutz Wiegrebe

Ella Lattenkamp

Eva Mardus

Ravi Umadi





In Erinnerung an



Lutz Wiegrebe

† 29.11.2019



FRIDAY

15:00 – 18:00		ARRIVAL & REGISTRATION
18:00 – 19:00		DINNER
19:00 – 19:05		WELCOME
19:05 – 20:50		SESSION 1: BEHAVIOUR Chair: Mirjam Knörnschild
19:05 – 19:35	Ahana Fernandez (Museum für Naturkunde Berlin)	Babbling, an extraordinary vocal practice behavior during ontogeny
19:35 – 19:50	Eva Mardus (LMU Martinsried)	The role of auditory feedback on the vocal development of normal-hearing and hearing-impaired <i>Phyllostomus discolor</i>
19:50 – 20:05	Sabine Schmidt (TiHo Hannover)	Stability of roosting patterns in a laboratory colony of <i>Carollia perspicillata</i> : neighbors matter!
20:05 – 20:20	Julia Weymann (TiHo Hannover)	Formation of social patterns in a newly assembled group of Sowell's Short Tailed Bats (<i>Carollia sowelli</i>)
20:20 – 20:35	Manuel Roeleke (Universität Potsdam)	Landscape structure influences social foraging behaviour in noctule bats
20:35 – 20:50	Shambhavi Chidambaram (HU Berlin)	How do nectar-feeding bats track a changing environment?
TIME TO BE GREGARIOUS		



SATURDAY

8:00 – 9:00			BREAKFAST		
9:00 – 10:15			SESSION 2: NEUROBIOLOGY Chair: Uwe Firzlaff		
9:00 – 9:30	<i>Francisco García-Rosales</i> (Goethe-Universität Frankfurt)	Processing of naturalistic acoustic streams in a fronto-auditory cortical circuit of the bat <i>Carollia perspicillata</i>			
9:30 – 9:45	<i>Luciana López-Jury</i> (Goethe-Universität Frankfurt)	Neuroethology meets predictive coding: the bat brain has neural priors that favor echolocation processing			
9:45 – 10:00	<i>Eugenia González-Palomares</i> (Goethe-Universität Frankfurt)	Mutual information and redundancy maps in the bat auditory midbrain in response to natural sound streams			
10:00 – 10:15	<i>Stephen Hörpel</i> (TUM Freising)	An analysis of temporal integration in bat vocal communication			
10:15 – 10:45			COFFEE BREAK		
10:45 – 12:00			SESSION 3: PHYSIOLOGY Chair: Annette Denzinger		
10:45 – 11:00	<i>Stephanie Reher</i> (Universität Hamburg)	Roosting outside the comfort zone – torpor at high ambient temperatures in a Malagasy bat			
11:00 – 11:15	<i>Nicolas Fasel</i> (UNIL Lausanne)	Insights into tropical torpor used by <i>Carollia perspicillata</i>			
11:15 – 11:30	<i>Carolina Kordges</i> (Philipps-Universität Marburg)	Are hibernation patterns of Noctule bats (<i>Nyctalus noctula</i>) in artificial winter roosts driven by ambient temperature?			
11:30 – 11:45	<i>Michael Walter</i> (Universität Tübingen)	Energy intake and sugar concentration discrimination in the nectar-feeding bat <i>Leptonycteris yerbabuena</i>			
11:45 – 12:00	<i>Jaap van Schaik</i> (Universität Greifswald)	Bats, flies and haemosporidians: co-phylogeography of a host, a parasite and a pathogen			
12:00– 13:30			LUNCH BREAK		



SATURDAY

13:30 – 15:45	SESSION 4: METHODOLOGY Chair: Stefan Greif	
13:30 – 14:00	<i>Simon Ripperger</i> (Ohio State University)	New perspectives on bat behavior: highlights from proximity sensing in the wild
14:00 – 14:15	<i>Anja Bergmann</i> (Museum für Naturkunde Berlin)	Non-invasive acoustic monitoring of swarming bats
14:15 – 14:30	<i>Moritz Mälzer</i> (Goethe-Universität Frankfurt)	Towards a radar-assisted bat fatality assessment at wind turbines: numerical and experimental results
14:30 – 14:45	SHORT BREAK	
14:45 – 15:00	<i>Klaus Hochradel</i> (UMIT)	Handheld measurements of three-dimensional directivity patterns for playback experiments
15:00 – 15:15	<i>Ravi Umadi</i> (LMU Martinsried)	Receiver directionality in echolocating bats (<i>Phyllostomus discolor</i>): A novel reconstruction technique
15:15 – 15:30	<i>Gabriella Krivek</i> (Universität Greifswald)	Automated bat species identification from images using deep neural networks
15:30 – 15:45	<i>Renate Rabenstein & Dagmar Stiefel</i> (FI Senkenberg, VSW)	Lethal teeth anatomy in <i>Pipistrellus</i> – a single case? Radiological investigations in extant bats
16:00 – 18:00	POSTER SESSION with coffee & Glühwein	
16:00– 17:00	<i>Odd poster numbers</i>	
17:00 – 18:00	<i>Even poster numbers</i>	
18:00 – 19:30	DINNER	



SATURDAY

19:30 MEMORIAL FOR LUTZ WIEGREBE 🌻		
SHORT BREAK		
20:00 – 20:45 SESSION 5: ECHOLOCATION Chair: Holger Goerlitz		
20:00 – 20:15	<i>Stefan Greif</i> (Tel Aviv University)	Technological approaches to study sensory aspects of foraging behavior in wild bats
20:15 – 20:30	<i>Laura Stidsholt</i> (Aarhus Universitet)	Spatial and temporal sensory trade-offs in <i>Myotis myotis</i> bats echolocating in the wild
20:30 – 20:45	<i>Léna de Framond</i> (MPI für Ornithologie)	Do bats compensate for weather-induced variations in sound attenuation to maintain detection distance?
20:45 GET BATTY! Host: Ravi Umadi		
	<i>Antoniya Hubancheva</i> (MPI für Ornithologie)	The mating song of the katydid <i>Ruspolia nitidula</i> may jam bat sonar
	<i>Thejasvi Beleyur</i> (MPI für Ornithologie)	Modelling active sensing in groups: (what) do bats hear in the cocktail party nightmare?



SUNDAY

8:00 – 9:00		BREAKFAST
9:00 – 10:30		SESSION 6: CONSERVATION Chair: Christian Voigt
9:00 – 9:30	<i>Christof Happ, Bruntje Lüdtke, Henrik Reers (UMIT, FrInaT, OekoFor)</i>	Vorstellung des F+E Vorhabens "Umsetzung der Naturschutzforschung am Windtestfeld an Land"
9:30 – 9:45	<i>Daniel Lewanzik (IZW Berlin)</i>	WTimpact – teaming up with citizen scientists to investigate urban habitat use on large scale
9:45 – 10:00	<i>Karl Kugelschafter (ChiroTEC)</i>	Saisonale Aktivitätsverläufe von einheimischen Fledermäusen an ihren Winterquartieren
10:00 – 10:15	<i>Andrea Schewe (Hochschule Anhalt)</i>	New information about the distribution of the Western Barbastelle in Swabia (Bavaria) and findings concerning their behavior according to LED light
10:15 – 10:30	<i>Tanja Straka (IZW Berlin)</i>	A question of trust and beliefs? Understanding emotions and cognitions of interest groups involved in the green-green dilemma in Germany
10:30 – 11:00		COFFEE BREAK
11:00 – 12:00		SESSION 7: ECOLOGY Chair: Marco Tschapka
11:00 – 11:15	<i>Ralph Simon (VU Amsterdam)</i>	Echo-acoustic traits of moths in response to predation pressure by bats
11:15 – 11:30	<i>Gloria Gessinger (Universität Ulm)</i>	Catching aerial prey: the hunting behavior of <i>Lonchorhina aurita</i> (Phyllostomidae)
11:30 – 11:45	<i>Thomas Hiller (Universität Ulm)</i>	Bat – bat fly interactions in Central Panama: a network analysis
11:45 – 12:00	<i>Marco Tschapka (Universität Ulm)</i>	The masked seducers: Lek courtship behaviour in the Wrinkle-faced bat <i>Centurio senex</i> (Phyllostomidae)
12:00 – 13:30		LUNCH & FAREWELL



POSTERS

(Odd numbers 16-17h, even numbers 17-18h)

Behaviour

- #1 *Claire Hermans* Behavioral response of bats to light intensity variation
- #2 *Kseniia Kravchenko* TBA
- #3 *Daniel Lewanzik* Insectivorous bats integrate social information about species identity, conspecific activity and prey abundance to estimate cost–benefit ratio of interactions
- #4 *Calvin Mehl* What changes movement patterns in open-space foraging bats?
- #5 *Theresa Schabacker* Bat in a Maze - an in-situ assay of exploration behavior

Conservation

- #6 *Marcus Fritze* With F.U.N. into the wild - Combining science and citizen's education
- #7 *Angelika Meschede* Long-term population trends in Bavarian bats – still on the rise?
- #8 *Christine Reusch* Spatial behaviour of common Noctule bats in relation to wind turbines

Echolocation

- #9 *Leonie Baier* Peeking through the foliage - Biosonar range resolution
- #10 *Johannes Fleischer* Comparison of the echolocation behaviour of *Rhinolophus pusillus* and *Hipposideros grandis* when foraging for prey
- #11 *Ilias Foskolos* Biosonar adjustments to masking in echolocating Daubenton's bats
- #12 *Neetash Mysuru* Quantifying changes in echolocation call parameters of free-flying horseshoe bat groups
- #13 *Pegah Negahdar* Unplug my nose! – Nasal and oral call emission in Phyllostomid bats?
- #14 *Holger Goerlitz* Behavioral responses of acuminate horseshoe bats to sexually dimorphic echolocation calls
- #15 *Diana Schöppler* Echolocation and flight behavior of *Hipposideros armiger* catching fluttering insects
- #16 *Bernadette Wimmer* Ortungsrufe von Myotis-Arten in unterirdischen Quartieren



Ecology

- #17 *Rohit Chakravarty* Functional Diversity and Community Structure of Bats along an Elevational Gradient in the Himalayas
- #18 *Patrick Cvecko* Tent-roosting Bats and where to find them: Roost site selection of tent-roosting bats across a lowland rainforest island system in Panama
- #19 *Nicolas Fasel* Penis morphology facilitates identification of cryptic African bat species
- #20 *Rabarison Hajatiana* Microhabitat preferences of bats roosting in a multi-species assemblage in a hot cave
- #21 *Antoniya Hubancheva* Bushcrickets may adapt bat predator avoidance behaviour to predator threat levels and age
- #22 *Theresa Hugel* What bats should know to catch a moth
- #23 *Andrea Koplitz-Weigerber* Fluctuating activity of *Myotis* and *Pipistrellus* bats in stables
- #24 *Eva Kriner* Stables as foraging habitats of bats
- #25 *Sina Remmers* Ready for climate change? The importance of adaptive thermoregulatory flexibility for Malagasy bats
- #26 *Olga Timofieieva* Do differences in ecological strategies influence heavy metals accumulation in two European bat species

Neurobiology

- #27 *Maria Geesdorf und Sophie Holtz* Mapping vocalization-related immediate early gene expression in the brain of Seba's short-tailed fruit bat, *Carollia perspicillata*
- #28 *Jan Pastyrik* Stimulus specific adaptation in bat echolocation
- #29 *Kristin Weineck (pres. Julio Hechavarria)* Neural oscillations in the fronto-striatal network predict vocal output in bats
- #30 *Johannes Wetekam* Auditory brainstem responses in the bat *Carollia perspicillata*: Threshold calculation and analysis of responses to amplitude modulated stimuli.

Physiology

- #31 *Ella Lattenkamp* Comparative hearing in eleven neotropical bat species
- #32 *Janine Mengede* Switching off bat genes to study vocal learning
- #33 *Michael Speidel* Drag me UP! Influence of surface tension and viscosity on the feeding performance of the nectar-feeding bat *Glossophaga soricina*