

Gülpe II

Electric fish meeting

October 13-15, 2021.



Wednesday, October 13th, 2021

- 15:30 Arrival & Coffee
- 16:30 **Ralph Tiedemann** (Uni Potsdam):
Understanding the morphological and electrophysiological divergence in Campylomormyrus electric fish.
- 17:10 **Andrew Sinnott** (Uni Potsdam):
Behavioural studies on Campylomormyrus.
- 17:30 **Jan Benda** (Uni Tübingen):
How to design a population of electrosensory neurons to optimally encode behaviorally relevant stimuli.
- 18:00 **Ibrahim Tunc** (Uni Tübingen):
Encoding of weak amplitude modulations by P-units in Apterodonotus leptorhynchus.
- 18:30 Dinner
- 20:00 **Stefan Mucha** (HU Berlin):
A spark in the dark — uncovering activity rhythms of mormyrids in the lab and in the wild.

Thursday, October 14th, 2021

- 8:00 Breakfast
- 9:00 **Livio Oboti** (HU Berlin):
Behavioral correlates of chirping behavior in Apterodonotus leptorhynchus.
- 9:30 **Timo Moritz** (Deutsches Meeresmuseum, Stralsund):
Auf der Suche nach elektrischen Fischen am Nil.
- 10:00 **Feng Cheng** (Uni Potsdam):
Genomics and transcriptomics of Campylomormyrus.
- 10:30 Coffee break
- 11:00 **Georg Welzel** (Uni Bayreuth):
The high-voltage immunity of strongly electric fish.
- 11:30 **Liz Weerdmeester & Jan-Hendrik Schleimer** (HU Berlin):
Robustness-energy trade-offs in a simulated Eigenmannia electrocyte model subject to temperature and O₂ changes.
- 12:00 **Anna Wurm** (Uni Tübingen):
Plasticity of the electric organ to changes in water conductance.

- 12:30 Lunch & Excursion
- 15:00 **Jan Grawe** (Uni Tübingen):
Receptive field sizes and neuronal encoding bandwidth are constrained by axonal conduction delays.
- 15:30 **Frank Kirschbaum** (Uni Potsdam):
Intragenus and intergenus hybridisations in mormyrid fish.
- 16:00 Coffee break
- 16:30 **Maria Schlungbaum** (HU Berlin):
Detecting weak periodic signals.
- 17:00 **Caroline Sachgau** (Uni Tübingen):
Multimodal integration — a proposal for studying multimodal encoding in Eigenmannia virescens.
- 17:30 **Alexandra Rudnaya** (Uni Tübingen):
Encoding of beats and chirps in Apterodonotus leptorhynchus at high difference frequencies.
- 18:00 **Otto Baumann** (Uni Potsdam):
Light-microscopical analysis of the three-dimensional organisation of electrocytes in Campylomormyrus compressirostris.
- 18:30 Dinner
- 20:00 **Sophie Picq** (Michigan State University):
Electric fish of French Guiana.

Friday, October 15th, 2021

- 7:30 Breakfast
- 8:30 Departure
- 10:30 **Peter Bartsch** (Naturkundemuseum Berlin):
Five Electrophorus voltai from Rio Xingu at the Naturkundemuseum Berlin.

Participants

Anna Wurm	Uni Tübingen
Alexandra Rudnaya	Uni Tübingen
Andrew Sinnott	Uni Potsdam
Benjamin Lindner	HU Berlin
Caroline Sachgau	Uni Tübingen
Feng Cheng	Uni Potsdam
Frank Kirschbaum	Uni Potsdam
Georg Welzel	Uni Bayreuth
Ibrahim Tunc	Uni Tübingen
Jan Benda	Uni Tübingen
Jan Grewe	Uni Tübingen
Jan-Hendrik Schleimer	HU Berlin
Livio Oboti	HU Berlin
Liz Weerdmeester	HU Berlin
Maria Schlungbaum	HU Berlin
Otto Baumann	Uni Potsdam
Peter Bartsch	Naturkundemuseum Berlin
Ralph Tiedemann	Uni Potsdam
Rüdiger Krahe	HU Berlin
Sebastian Kraft	HU Berlin
Sophie Picq	Michigan State University
Stefan Mucha	HU Berlin
Timo Moritz	Deutsches Meeresmuseum, Stralsund

Venue

Ökologische Station Gölpe of the University Potsdam
<https://www.uni-potsdam.de/de/ibb/ibb/standorte/guelpe>

Contact

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