



112th Annual Meeting of the
German Zoological Society
10-13 September 2019 | Jena

Pocket Guide

The Abstracts and Program can be
downloaded here:

<https://dzg-meeting.de>

* = student contribution



10 TONS
MEDUSEN
ERNST HAECKEL
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MEDUSEN
10 TONS

Eine Sonderausstellung im Phyletischen Museum

Monday 9.9.

Lecture Hall – Zoologie, Erbertstrasse 1

Gr H 12⁰⁰ **Form and Function** 17³⁰ **H1**

Lecture Halls – Ernst-Abbe Platz

H3 14⁰⁰ **Neuroethology** 18³⁰

H4 13⁰⁰ **Microbes as Drivers** 18³⁰ **H1**

Tuesday 10.9.

Lecture Hall – Zoologie, Erbertstrasse 1

Gr H 9⁰⁰ **Form and Function** 13⁰⁰

Lecture Hall – Ernst-Abbe Platz

H3 9³⁰ **Neuroethology** 15¹⁵

Ernst-Abbe-Platz, Seminar rooms

Meeting of the DZG
Board **S 2.2.1**

Meeting of FG
Speakers **S 2.2.2**

Advisory Board Meeting **S 2.2.1**

Main Meeting

Ernst-Abbe-Platz, H1

18⁰⁰ **Opening, Welcome**

18³⁰ **Public Lecture**

Martin S. Fischer, Stefan Richter,
Johannes Krause, Uwe Hoßfeld

Jena, Haeckel und die Frage nach den
Menschenrassen oder der Rassismus macht
Rassen

Ernst-Abbe-Platz, Foyer

20⁰⁰ **Reception**

(food and drinks)

Wednesday 11.9.

9⁰⁰ **Greger Larson (Oxford, UK)**

Unifying domestication and evolutionary
biology through ancient DNA & deciphering
dog domestication through a combined ancient
DNA and geometric morphometric approach

10⁰⁰ **Ludovic Orlando (Toulouse, FR)**

Evolutionary origins and impact of the horse
on human history

Coffee Break

11³⁰ **Cathrin Pfaff (Wien, AT)** **H1**

Enter the labyrinth - Functional morphological and
phylogenetic signals of the organ of balance in
vertebrates

Lennart Olsson (Jena, DE) **H3**
From the Biogenetic law to the hour-glass model: is
there a conserved stage in vertebrate development?

Marian Yong-An Hu (Kiel, DE) **H4**
pH regulation in marine calcifying systems

12⁰⁰ **Tim Wollesen (Heidelberg, DE)** **H1**
Insights into lophotrochozoan evolution – on the
morphology and molecular signature of single cells
in a mollusk with pronounced ancestral traits

Naoki Irie (Tokyo, JP) **H3**
Haeckel's recapitulation theory refuted by the
hourglass model?

Georg Petschenka (Gießen, DE) **H4**
Plant toxins as a driver of insect-plant coevolution

12³⁰–14⁰⁰ **Lunch Break (self-organized)**

MOR H1 **DEV H3** **PHY H4**

14⁰⁰ **Y. Matsumura**
Fluid dynamics
within structurally
diversified
spermathecae in...

**Tomislav
Domazet-Lošo
(Zagreb, HR)**
Phylogeny-ontogeny
correlations: lessons
from microbial
biofilms

A. Krüger*
Molecular
mechanisms of
hypoxia tolerance in
the whale brain
C. Gessner
All you need is love?
No, it is oxygen:
detecting positive
selection in deep...

14¹⁵ **B. Eggs***
Ovipositor bending
movements of a
chalcidoid wasp

14³⁰ **F. Quade**
High-resolution 3D
microscopy and the
homology of genital
organ components...

NEU H3
L. Ragionieri
Specific features in
the Neuropeptidome
of the bumble bee,
Bombus terrestris

J. Rösner*
Identification of ABC
transporters involved
in the elimination
of diflubenzuron
using...

14⁴⁵ **A. Richter***
The evolution of
head morphology in
ants: analysis of an
understudied...

G. Bucher
Heterochronic
development of the
central complex:
Using genome...

B. Wellmeyer*
Functional
characterization of an
ABCG transporter from
Tribolium castaneum

15⁰⁰ **B. Josten***
Functional
morphology of the
mouthparts in adult
Anax imperator
(Odonata...)

V. Hofmann
Impact of correlated
neural variability on
the encoding of
natural stimuli at the
population level...

G. Gäde
The adipokinetic
hormone/corazonin-
related peptide
(ACP) system in the
mosquito, *Aedes*...

15¹⁵ **A. Köhnens***
Influence factors on
the performance of
the predatory strike
in dragonfly larvae

L. Baier
Peeking through
the foliage – Range
resolution in
echolocating bats

V. Diedrich
Acclimation of
intestinal morphology
and function in
Djungarian hamsters...

	MOR H1	NEU H3	PHY H4
15 ³⁰	Dennis Hazerli* The evolution of swimming crabs – homologous or convergent?	H. Dircksen Orcokinin in primary olfactory and other sensory neurons, interneurons and neurosecretory neurons in the CNS of the crayfish...	C. Krempf Physiological effects, toxicity and detoxification of gossypol, a cotton secondary metabolite in Heliothine moths
15 ⁴⁵	T.H. Büscher* Morphology and synergistic action of complementary attachment pads in stick insects (Phasmatodea)	S. Liessem* Myoinhibitory peptide is a co- transmitter in CI and DUM neurons and reduces slow muscle contractions	C. Müller The Hirudin superfamily

Coffee Break

	MOR H1	DEV H3	BEH H4
16 ³⁰	M. Yavorskaya Anatomy of some of the smallest free- living crustaceans (Cladocera, Branchiopoda)	O. Netschitailo* The glu gene is required for the sexual dimorphic head development in workers of the honeybee <i>Apis mellifera</i>	H. Wolf How to run fast – strategies in desert ants
16 ⁴⁵	P. Kalke* Morphology and innervation of head appendages in the ampharetid annelid <i>Hypania invalida</i>	B. Naumann Spatial cell disparity in the colonial choanoflagellate <i>Salpingoeca rosetta</i>	T. Beleyur* (What) Do bats hear in the cocktail party nightmare?
17 ⁰⁰	S. Kuhl* Uncovering the hidden dynamics in the development of ciliary bands in <i>Platyneris dumerilii</i> and <i>Thalassema thalassemia</i> ...	J. Taubenheim Temperature and insulin signaling regulate body size in <i>Hydra</i> by the Wnt/ TGF-β pathway	C. Wegener Natural Zeitgeber cannot compensate for the loss of a functional circadian clock in behavioural gating
17 ¹⁵	S. Büsse Multifunctional feet: How webspinners (Insecta: Embioptera) can walk and spin with the same tools	F. Kaufholz* Is the breakdown of posterior segmentation irreversible?	T. Thünken Sex, snacks, sibs – and their impact on mound building in a cichlid fish: the evolution of an extended...

Ernst-Abbe-Platz **H1 H3 H4**

Poster Primers

“Fachgruppen” meetings

EVO H1 **DEV H3** **PHY H4** **NEU H5**
ECO H1 **SYS H3** **MOR H4** **BEH H5**



Ernst-Abbe-Platz, Foyer

Poster Session I
(including food and drinks)

9⁰⁰ **Elizabeth Jockusch (Storrs, US)**
H1 Serial homology, novelty and the evolution of panarthropod body plans

10⁰⁰ **Federico Brown (São Paulo, BR)**
H1 Unravelling the evolution of animal coloniality: a case study in tunicates of a solitary to a colonial transition

Coffee Break

11³⁰ **Eva K. Fischer (Stanford, US)**
 Mechanisms of Behavioral Evolution **H1**

Paschalia Kapli (London, UK)
 The As and Bs of animal phylogeny **H3**

Christian Nawroth (Dummerstorf, DE)
 Goats who stare at scientists – human-directed behaviour in livestock **H4**

12⁰⁰ **David Oswald (Berlin, DE)**
 Waking at night. Slow-wave oscillations in *Drosophila* **H1**

Björn von Reumont (Gießen, DE)
 Evolutionary venomics of pancrustaceans **H3**

Vera Schlüssel (Bonn, DE)
 'Sharkspere' & 'Sharkira' – Sharks may not write poems or songs, but they can still hit the right notes in many cognitive tasks **H4**

12³⁰-14⁰⁰ Lunch **H1** **12³⁰-13¹⁵** Meet **DFG** **H1**

	EVO H1	MOR H3	ECO H4
14 ⁰⁰	D. Meuthen Transgenerational phenotypic plasticity in the cyprinid <i>Pimephales promelas</i>	R. Taszus* Experimental taphonomy of cyclostome muscle tissue and the implications for...	D. Trense* Natural vs anthropogenic barriers to butterfly dispersal – insights from landscape...
14 ¹⁵	T. Pauli Chemoreceptor diversity and lineage specific gains and losses in the stinging wasps, ants and...	J. Chaumel* Confused chondrocytes: Are the cells in stingray mineralized cartilage performing the...	M.A.-L. Kahler* Species diversity and ecology of Aculeata in the understory of the Leipzig floodplain forest
14 ³⁰	R. Burri Genomics of hybridization, speciation, and parallel phenotypic evolution in a ...	R. Seidel Sustained function despite constant wear – structural and mechanical reinforcements of...	M. Horstmann* Facing the green threat: A waterflea's defences against a carnivorous plant
14 ⁴⁵	W. Krings* Tracing evolution tooth by tooth: Convergent trophic specialization of a paludomid species...	A. Kupfer Detentional metamorphosis in caecilian amphibians: a reanalysis	J. Virgo* Acoustic ecology and host specificity of frog-biting midges (Diptera: Corethrellidae)
15 ⁰⁰	J.D.M. Tolliver* Finding a Ruff wingman: modelling male-male cooperation under strong sexual...	H. Müller Development of the cranial musculoskeletal system in foetuses of the West African...	A. Neu* Host plant use in the range-expanding butterfly <i>Pieris manii</i>
15 ¹⁵	E. Buchberger* Evolution of the gene regulatory network underlying eye and head development in closely related...	C. Foth Comparative analysis of the size and shape of the middle ear cavity of turtles	D. Lewanzik* Insectivorous bats integrate social information about species identity, conspecific activity...

	EVO H1	MOR H3	ECO H4
15 ³⁰	C. Ün* <i>Wolbachia</i> -Induced cytoplasmic incompatibility in <i>Cardiocondyla obscurior</i>	J. Sartori* Tracking tendon fibers to their insertion	L.M. Jaimes Niño* Diversity and trait patterns of moths at the edge of an Amazonian rainforest
15 ⁴⁵	D. Frisch Dissecting the transcriptomic basis of phenotypic evolution in an aquatic keystone...	M.S. Fischer Dogs in motion	H. Schielzeth A rethink of ecological niches

Coffee Break

	DEV H1	MOR H3	ECO H4
16 ³⁰	S. Kaul Diploblastic sea anemones have distinct cell types with signatures reminiscent of...	A. Gruhl Skinny eaters – structure and function of a digestive epidermis in an animal...	C.V. de Castro* Can parasitoids shift the outcome in an antagonistic nursery pollination system? An ecological detective...
16 ⁴⁵	P. Steinmetz Developmental and cellular insights into oogenesis in the sea anemone <i>Nematostella</i> ...	A. Stöbel Functional morphology of the middle ear of <i>Homo</i> and <i>Pan</i>	V. Nehring For they had brought destruction upon themselves: How host and not parasite variation predicts...

	SYS H3	PHY H4
17 ⁰⁰	A. Klimovich Role of taxon-restricted genes in cell type evolution: Insights from the cnidarian <i>Hydra</i>	K. Amatobi* Circadian clocks determine intermediate lipid metabolism and storage lipid ...
17 ¹⁵	N.-M. Prpic-Schäper FoxB, a new and highly conserved key factor in arthropod dorsal-ventral limb patterning	R. Özbek* Insights into the venom composition and its biological functions of the endoparasitoid wasp...
17 ³⁰	M. Pechmann Organizing the organizer: A novel role for Ets4 in axis specification and cell migration in the ...	O. Baumann Ca ²⁺ signaling via 5-HT7 receptors in blowfly salivary glands
17 ⁴⁵	F.A. Franke Evolution and functionality of closely related Wnt genes in <i>Drosophila melanogaster</i>	S. Schuster Optimal hematocrit theory under consideration of natural blood dopers and diving animals

Ernst-Abbe-Platz, H1

18⁰⁰ Rathmayer Prize Ceremony

18¹⁵ Public Lecture
Hans Fricke, Seewiesen
 Aale – auf den Spuren eines Jahrhunderträtsels

19¹⁵ **Ernst-Abbe-Platz, Foyer**
Poster Session II
 (including food and drinks)

9⁰⁰ **John Nyakatura (Berlin, DE)**
H1 Reverse-engineering the locomotion of a stem amniote – insights from a multidisciplinary approach

10⁰⁰ **Rolf Beutel (Jena, DE)**
H1 From Hennig to genomes – the evolution of insect phylogeny

Coffee Break

11³⁰ **Alice Dennis (Potsdam, DE)**
 Evolution of infectivity in parasitoid wasps **H1**

Ina Schaefer (Göttingen, DE)
 Flickering lights below the ground: what molecules tell us about an invisible world **H3**

12⁰⁰ **Dino McMahon (Berlin, DE)**
 The evolution of termite immunity **H1**

Karsten Mody (Darmstadt, DE)
 Valuing intraspecific variation in plant-animal interactions: from individual traits to restoration sites and agro-ecosystems **H3**

12³⁰-14⁰⁰ Lunch Break (self-organized)

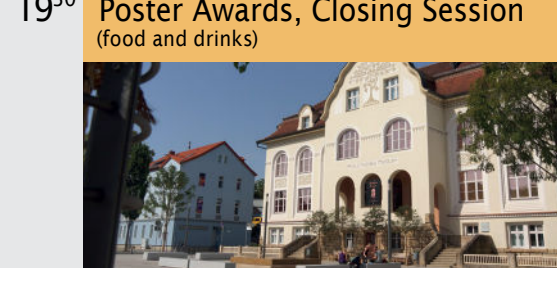
	EVO H1	SYS H3	BEH H4
14 ⁰⁰	M. Unbehend Evolution in action: adaptation of the sexual communication...	C.G. Höpel* Cryptic diversity influence on the phylogeographic pattern in Tasmanian mountain shrimps...	L. Vrbanc* Evolution of problem- solving as an adaptation to a manmade...
14 ¹⁵	K. Preissler* Imperiled by an expanding pathogen: Using management units of the fire...	K.C.M. von Oheimb Cryptic diversity revealed: operculate land snails (<i>Cyclophorus</i> spp.)...	H.R. Goerlitz Anti-predator strategies in singing and non-singing insects against...
14 ³⁰	M. Majoe* Ant workers' susceptibility to paraquat induced oxidative stress in...	C. Helm New insights into the evolution of the Charlie Chaplin worms (Annelida...)	C. Blut Automated tracking of honeybee behavior using the Bee Behavioral...
14 ⁴⁵	J. Buellesbach From ants to wasps: Evolutionary conserved cuticular hydrocarbon...	G. Brehm The first comprehensive study of insect body mass for a complete...	S. Kraus* The influence of the early environment on behavioural and physiological traits...
15 ⁰⁰	C. Bauch Sex-specific telomere dynamics in relation to age and reproductive...	T. van Elst* Ultraconserved elements help to resolve evolutionary relationships...	J. Frommen Direct and indirect fitness benefits as drivers of complex group structure
15 ¹⁵	U. Ernst One, two, many - honeybee queen pheromones are manifold and...	C. Ewers-Saucedo Reconstructing two hundred years of faunal change in North and Baltic...	J. Rinke* Regulation of worker reproduction in <i>Camponotus maculatus</i>
15 ³⁰	M. Trieniens Rapid but narrow – Adaptation of <i>Drosophila</i> to toxic mould...	C. Barratt Afrotropical biogeography and conservation using high-throughput...	R. Lakes-Harlan Traffic noise influences the acoustic communication signal of the bush cricket...
15 ⁴⁵	S. Kamps* The role of the fruitless (fru) gene in specifying evolved male behaviours in...	G. Haszprunar Overcoming the taxonomic impediment in "dark taxa" by DNA...	H. Herzog Generation of Gellermann sequences and evaluation of learning success in...

Coffee Break

Ernst-Abbe-Platz, H1

16³⁰ Walther Arndt Prize and Horst Wiehe Prize Ceremony

18⁰⁰ DZG - Member Assembly



Saturday 14.9.

Lecture Hall – Zoologie, Erbertstrasse 1

KI H **9⁰⁰** Animal Welfare **13⁰⁰**

