



## AVA Animal Visual Ecology Symposium 2009, Regensburg, Germany

Friday, 28 August 2009, "Salzstadel", Weiße-Lamm-Gasse 1, Regensburg

18:00 – 18:30 Invited Lecture. Martin Egelhaaf. *Active vision: Strategies and neuronal mechanisms of spatial orientation behaviour in insects*

19.00 – 23.00 Danube river boat cruise on "MS Regensburg", dinner included, with music, dancing, and cash bar serving beer and soft drinks. Departs from/returns to quayside adjacent to meeting venue. Tickets, costing 25 €, available from ECVP and AVA registration desks before cruise.

Saturday, 29 August 2009, "Salzstadel" Weiße-Lamm-Gasse 1, Regensburg

### Talks

#### *Optics & Photoreceptors*

09:00	Mirror optics in a vertebrate eye Julian C. Partridge, Ron H. Douglas, Nick Roberts, Tammy Frank, Hans-Joachim Wagner
09:20	Polarization Detection and Polarization Control in Photoreceptor Optics Nick W Roberts, T-H Chiou, N Justin Marshall, Tom W Cronin
09:40	Orientation dependent acuity in the visual system of <i>Cupiennius salei</i> Lisa Fenk, Axel Schmid
10:00	Lateral line photosensitivity in <i>Xenopus laevis</i> ? Gary E. Baker, Lori Singh, Hans-Joachim Wagner, Wim J. DeGrip, Ron H. Douglas
10:20	Diet-related variation in the vision of two avian species Ben Knott, Mathew L. Berg, Katherine L. Buchanan, James K. Bowmaker, Andrew T.D. Bennett
10:40	Seeing red: an arms race in the deepsea? Jonny Turner, Elizabeth White, Martin Collins, Julian Partridge, Ron Douglas

**11:00 – 11:40 Coffee and Posters**

***Colour vision***

11:40	<b>Invited Lecture. Nocturnal colour vision. Almut Kelber</b>
12:10	Colour flower detection by honeybees and bumblebees. Adrian G Dyer, Thomas Lloyd-Smith
12:30	Foraging by bumblebees ( <i>Bombus terrestris</i> L.) under patchy light conditions Sarah Arnold, Lars Chittka
12:50	Dogs considered colour cues to be more informative than brightness Anna Kasparson, Jason Badridze, Vadim Maximov

**13:10 – 14:00 Buffet Lunch and Posters**

***Camouflage & Signals***

14:00	The power of redundancy! What might the power spectra of cuttlefish body patterns tell us about signaling and camouflage? Sarah Zylinski, M.How, Justin Marshall, Daniel Osorio
14:20	Computer Vision based Analysis of Moth Camouflage. David P. Gibson, Emma Howell, Neill W. Campbell, Tom Troscianko, Innes C. Cuthill
14:40	Disruptive coloration and background visual complexity Irene Espinosa Gonzalez-Garza, Innes C. Cuthill
15:00	Eggshell patterns are evolutionarily conserved among birds. Phill Cassey, Golo Maurer, Steven J. Portugal, P. George Lovell
15:20	Visual signals in the pollination of sexually deceptive orchids. Johannes Spaethe, Martin Streinzer, Hannes F. Paulus

**15:40 – 16:20 Tea and Posters**

***Spatial vision motion & navigation***

16:20	<b>Invited Lecture. Marc W. Holderied. Information flow control by navigating animals: some unexpected similarities between vision and echolocation</b>
16:50	What is binocular vision for? A bird's eye view. Graham R. Martin
17:20	Movement detectors projecting to the fish tectum. Ilija Damjanović, Elena Maximova, Paul Maximov, Vadim Maximov
17:40	Investigating the scale of view-based homing: how far can you roam with just one snapshot? Andrew Philippides, Paul Graham

*18:00 – 19:00 Beer and Posters*

*19:20 – 22:00 Bratwurst and Beer dinner at “Wurstküchl” (on ground floor of Salzstadl conference venue)*

## **Posters**

Estimation of the wavefront aberration for peripheral vision in the pigeon eye  
Y. Garcia, C. Torti, B. Považay, J.A. Guggenheim, W. Drexler, J.T. Erichsen

Distance estimation mechanisms in Anura  
Vladimir Bastakov

Spatial vision in birds and mammals  
John R Jarvis, Christopher M Wathes

The Crater Lake Cichlids of Cameroon – Visual Ecology, Opsin Molecular Evolution and Implications for Sympatric Speciation  
Gerald Timelthaler, Anton Lamboj, Johannes Spaethe

Visual fields in tool-using New Caledonian crows  
Troscianko, J, Chappell, J, Bayern, AV, Rutz, C, Martin, GR

Spatial Organisation of the Cone Photoreceptor Mosaic of the Domestic Chicken (*Gallus gallus*)  
L. Wilkins, D. Osorio, N. Hart

Recognition of rotated symmetrical patterns and perception of 3-D objects by chicks.  
Elena Mascalzoni, Daniel Osorio

Sexual dimorphism of the visual system in a long-horned bee and its implications on mating ecology  
Martin Streinzer, Johannes Spaethe

Patterns of Plumage Brightness In An Island Bird Population  
J. D. Avery, J. L. Lockwood, P. Cassey

Comparing image structure with local motion structure in real life optic flow  
Szonya Durant, Johannes M. Zanker