

**The 7<sup>th</sup> ACEVS-CVS Summer School on Animal Navigation**  
**1 December – 5 December 2008**

ARC Centre of Excellence in Vision Science (ACEVS) & Centre for Visual Sciences (CVS)  
Research School of Biological Sciences  
The Australian National University  
Canberra

**Target Group:** 3rd year, honours and PhD students of Biology, Psychology and Robotics

**Topics:** Principles, concepts and experimental techniques in animal and robot navigation. Landmark guidance, view-based homing, path integration, odometry, biological compasses and animal migration. Optic flow processing and neuro-ethological robotics.

**Lecturers:** Nick Barnes, Andy Barron, Russell Brinkworth, Javaan Chahl, Ken Cheng, Allen Cheung, Matt Garratt, David O'Carroll, Jochen Zeil, Shaowu Zhang, Uwe Zimmer and others.

**Deadline for Applications: 26 September 2008**

**The Summer School is an accredited course.**

For details see: [http://www.anu.edu.au/BoZo/special\\_topics/front\\_page/st\\_front\\_page.php](http://www.anu.edu.au/BoZo/special_topics/front_page/st_front_page.php).  
To discuss requirements & assessment plan, contact Jochen Zeil ([jochen.zeil@anu.edu.au](mailto:jochen.zeil@anu.edu.au)).

See below for How to Apply.

For further enquiries contact Jochen Zeil ([jochen.zeil@anu.edu.au](mailto:jochen.zeil@anu.edu.au)).

The mechanisms of animal navigation are internationally a hot research topic, not only in biology, but also in robotics. This summer school aims to introduce students from Australia and New Zealand to a fascinating and rapidly developing multi-disciplinary research field. We plan to have daily sessions of lectures, seminars and practical demonstrations, in a discussion-based, round-table environment, on the following topics:

**Preliminary schedule**

Day 1: ***Animal Navigation: An Overview of Phenomena and Mechanisms***

Day 2: ***The Knowledge Base of Insect Navigation***

Day 3: ***Navigation by Path Integration***

Day 4: ***Neurobiology of Optic Flow Processing & Spatial Representation***

Day 5: ***Robot Navigation: Engineering Solutions vs Biological Inspiration.***

**Venue:** Robertson Seminar Room, Research School of Biological Sciences (RSBS), The Australian National University (ANU), Canberra

## How to apply

Please send

- A covering letter explaining why you are interested in Animal Navigation and a brief description of the research project you are currently working on or which you are planning to do in future. Please indicate in the letter whether you would need travel assistance.
- Your CV, including your transcript.
- One brief letter of reference.

to:

**Jochen Zeil**  
**ACEVS-CVS Summer School 2008**  
**Research School of Biological Sciences**  
**The Australian National University**  
**P.O. Box 475**  
**Canberra, ACT 2601**  
**Australia**

or

**by email to:**

jochen.[zeil@anu.edu.au](mailto:zeil@anu.edu.au)

### **Deadline: 26 September 2008**

Accommodation and meals are provided. Travel assistance is also available. Please note that there will be only 20 places in the Summer School and that the selection process may therefore be very competitive. However, the Summer School is a yearly event, so that there will be more opportunities to take part over the next few years.

We will notify you of the outcome of your application by 10 October 2008.