

## ECEM Board Meets 15 min Earlier: Tue, 12.30 pm!

The ECEM board meeting will take place on **Tuesday, 12.30 pm** – 1.20 pm, instead of 12.45 pm – 1.20 pm, in the *Visitors Room* (indicated by ‘VR’ on the map and located between the help desk an HS 30).

## SMI Programming Competition Finals

**Where:** *Visitors Room* (indicated by ‘VR’ on the map and located between the help desk an HS 30)

**When:** Tuesday during the Poster session, 3.00 – 5.00 pm.

### **Junpeng Lao, University of Fribourg: iMap 4**

iMap 4 is an open source Matlab toolbox for the statistical fixation mapping of eye movement data, implementing a user-friendly interface that provide straightforward, easy to interpret statistical graphical outputs.

### **Dimitri Heil, University of Bielefeld: Gaze based browsing (presented by Patrick Renner)**

In the past years the eyes have become more and more important in human-computer interaction. We took the idea of using the eyes to interact with the computer and applied it to navigating through the internet. Using our gaze-based browsing extension, users can surf the internet without the need to use a mouse or keyboard. They can scroll through the news, just like reading a newspaper, read some articles or look something up all by just gazing at the screen.

### **Matt Dunn, Cardiff University: EyeTrace2Movie**

Two-dimensional eye traces are an abstract way of viewing eye movements. When assessing oculomotor pathology, it can be difficult to imagine what the eye movements actually looked like clinically, based solely on the eye trace. This lightweight app provides a useful way of converting an eye trace back into a view of the patient. It reads in an eye trace file (one or two-dimensional; monocular or binocular), and converts it into a movie file of an animated pair of eyes, with the original eye traces shown below for reference.

## Changes to the Schedule

The changes listed on the following pages also available at all online resources:

**ECEM website** <http://ecem2015.univie.ac.at/about-ecem-2015/conference-programme/>

**ConfTool** <https://www.conftool.pro/ecem2015/>

**ECEM App** <https://guidebook.com/browse/>  
for details about how to access the App see p. 16 of the programme booklet.

## Monday, Talk Session 2, in HS 32: 1.20 am - 3.00 am

Thematic session

### Microsaccades

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HS 32

Chair: Shlomit Yuval-Greenberg

- 1.20 pm Monocular microsaccades reflect eye dominance  
*Josselin Gautier, Harold Bedell*
- 1.40 pm ~~Revising the link between microsaccade direction and the spatial cueing of attention~~  
~~*Susann Meyberg, Petra Sinn, Ralf Engbert, Werner Sommer*~~ CANCELLED
- 2.00 pm Visual categorization boosts microsaccade rate  
*Yingdi Liu, Junpeng Lao, Nicolas Ruffieux, Françoise Colombo, Sébastien Miellet, Roberto Caldara*
- 2.20 pm The interdependence of microsaccades and its modulation by the visual context  
*Shlomit Yuval-Greenberg, Roy Amit*
- 2.40 pm Are microsaccade amplitudes overestimated in modern studies?  
*Richard Andersson, Dan Witzner Hansen, Ignace T. C. Hooge, Marcus Nyström*

## Tuesday, Talk Session 1, in HS 32: ~~8.50 am~~ 9.10 am - 10.30 am

Thematic session

### Eye movements and reading: Influences of higher cognition

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HS 32

Chair: Marlit Annalena Lindner

- ~~8.50~~ 9.10 am Mass measurement of fixation behaviours and audience nature in a realistic educational setting  
*Richard Shillcock, Cara Wase*
- 9.10 9.30 am Unraveling the Multimedia Effect in Testing: How Representational Pictures Affect Schoolchildren's Processing of Multiple-Choice Questions  
*Marlit Annalena Lindner, Olaf Köller*
- 9.30 9.50 am Eye movements during the recollection of text information reflect content rather than the text itself  
*Franziska Traub, Roger Johansson, Kenneth Holmqvist*
- ~~9.50 am~~ ~~Verbal working memory load does not constrain parallel language activation in bilinguals : Evidence from a visual world eye tracking study~~  
~~*Seema Prasad, Ramesh Mishra*~~ CANCELLED
- 10.10 am Comparison of Scanpaths Using Multimatch Algorithm – Influence of Affect, Photo Content, and Individual Differences  
*Maksymilian Bielecki, Domaradzka Ewa, Zakrzewska Marta*

**Tuesday, Talk Session 3, in HS 31: 5.00 pm - 6.40 pm**

Thematic session

**Eye movements: Neurophysiology and EEG****HS 31**

Chair: Andrey Nikolaev

- 5.00 pm Pre-target activity of V1 linked to occurrence of express latency saccades  
*Kayeon Kim, Choongkil Lee* CANCELLED
- 5.20 5.00 pm Saccadic Eye Movements and Neural Correlates Involved during Letter and Object Naming Speed Tasks  
*Noor Z. Al Dahhan, Donald C. Brien, John R. Kirby, Douglas P. Munoz*
- 5.40 5.20 pm Expecting a Surprise? EEG Signal Dynamics in Unrestricted Natural Visual Search  
*Alexander Varatharajah, Juan E. Kamienkowski, Lisandro N. Kaunitz, Mariano Sigman, Rodrigo Quiaro Quiroga, Matias J. Ison*
- 6.00 5.40 pm Simultaneous processing of EEG and eye movements in free viewing behavior  
*Andrey R. Nikolaev, Cees van Leeuwen*
- 6.20 6.00 pm The effect of secondary cognitive task demand on fixation event related potentials (fERPs) during a hazard perception task  
*Steven W. Savage, Benjamin W. Tatler, Douglas D. Potter*

**Thursday, Talk Session 1, in HS 32: 8.50 am 9.10 am - 10.30 am**

Thematic session

**Mobile eye-tracking: Tools and findings****HS 32**

Chair: Charlotte A. Riggs

- 8.50 9.10 am Rummage Searching for Targets by Individuals, Teams and Experts  
*Charlotte A. Riggs, Carl M. Mann, Hayward J. Godwin, Sarah Smith, Michael Boardman, Simon P. Liversedge, Nick Donnelly*
- 9.40 9.30 am Do it yourself! Active object handling leads to faster search times.  
*Dejan Draschkow, Melissa Le-Hoa Võ*
- 9.30 9.50 am Automatic Analysis of a Mobile Dual Eye-Tracking Study on Joint Attention  
*Patrick Renner, Thies Pfeiffer, Nadine Pfeiffer-Lefßmann*
- 9.50 am GazeVideoAnalyzer – A Modular Approach Towards Automatic Annotation of Gaze Videos using Robust Object Recognizers  
*Kai Essig, Dato Abashidze, Thomas Schack* CANCELLED
- 10.10 am Application of Markov chains in the analysis of data acquisition process in ship simulator environment  
*Bartosz Muczynski, Maciej Gucma*

**Monday, Posters, 3.00 pm - 5.00 pm****Cognitive influences**

- Mon-11 ~~Some features of perception of media-creolized texts~~ CANCELLED  
*Elina Bulatova, Olga Lomtadze*
- Mon-11 Patterns of L1-L3 and L2-L3 cognate facilitation in multilingual speakers during sentence reading  
 Previously: Friday, Posters, Fri-51  
*Agnieszka Lijewska*

**Vergence**

- Mon-62 Temporal visual function in infantile nystagmus  
 Previously: Tuesday, Posters, Tue-42  
*Matt James Dunn, Jonathan Thor Erichsen*

**Tuesday, Posters, 3.00 pm - 5.00 pm****Visual influences**

- ~~Tue-42 Temporal visual function in infantile nystagmus~~ Moved to: Monday, Posters, Mon-62  
~~*Matt James Dunn, Jonathan Thor Erichsen*~~
- Tue-42 Normalized eye movement metrics across motor simulation states: a difference of perspective?  
 Previously: Friday, Posters, Fri-26  
*Sheree Ann McCormick, Nicholas Costen, Paul Holmes*

**Visual search**

- ~~Tue-42 Temporal visual function in infantile nystagmus~~ Moved to: Monday, Posters, Mon-62  
~~*Matt James Dunn, Jonathan Thor Erichsen*~~
- Tue-58 Eyes movement in the visual semantic search  
 Moved to: Friday, Posters, Fri-4  
*Irina Blinnikova, Anna Izmalkova, Natalia Rotova*
- Tue-58 Applying eye tracking technologies in foreign language vocabulary learning studies  
 Previously: Friday, Posters, Fri-4  
*Anna Izmalkova, Irina Blinnikova*
- Tue-62 Dominant eye vs. Cyclopean eye in gaze interface tracking  
 Previously: Friday, Posters, Fri-3  
*Michael Wagner, Tomer Elbaum, Assaf Botzer*

**Thursday, Posters, 3.00 pm - 5.00 pm****Social influences**

- ~~Thu-61 Sexually motivated attention and decision making~~ CANCELLED  
*Anna Kathryn Oostendorp, Hugo M. Kehr*

**Friday, Posters, 1.30 pm - 3.30 pm****Applications**

- Fri-3 Dominant eye vs. Cyclopean eye in gaze interface tracking Moved to: Tuesday, Posters,  
 Tue-62  
*Michael Wagner, Tomer Elbaum, Assaf Botzer*
- Fri-4 Applying eye tracking technologies in foreign language vocabulary learning studies Moved to: Tuesday, Posters, Tue-58  
*Anna Izmailkova, Irina Blinnikova*
- Fri-4 Eyes movement in the visual semantic search Previously: Tuesday, Posters, Tue-58  
*Irina Blinnikova, Anna Izmailkova, Natalia Rotova*

**Biological influences**

- Fri-26 Normalized eye movement metrics across motor simulation states: a difference of Moved to: Tuesday, Posters, Tue-42  
 perspective?  
*Sherree Ann McCormick, Nicholas Costen, Paul Holmes*

**Influences of individual differences**

- Fri-36 Which aspects are important to elicit gaze following in typically developing infants? CANCELLED  
*Lise Van Schuerbeeck, Marijke A.K.A. Bracken, Jean Steyaert, Raf Meesen, Marleen Vanvuchelen*

**Reading**

- Fri-51 Patterns of L1-L3 and L2-L3 cognate facilitation in multilingual speakers during Moved to: Monday, Posters, Mon-11  
 sentence reading  
*Agnieszka Lijewska*