

ENTRAINMENT OF BRAIN OSCILLATIONS 2015  
HWK, Delmenhorst  
September 17-18 2015

KEYNOTE SPEAKERS

**Prof. Dr. Joachim Gross (17.09. 16:00Uhr)**

*Dynamic stimulus coding and segmentation in the brain*

**Prof. Dr. Ole Jensen (18.09. 15:00Uhr)**

*Manipulating human brain oscillations using entrainment and neurofeedback*

SYMPOSIA

*Talks will be 15 minutes with 5 minutes of discussion. Please come to your session chair before your talk and ensure that your presentation is working properly.*

**Symposium: Auditory Stimulation (17.09. 17:00Uhr)**

Session Chair: Alina Baltus

*Selective spatial attention in a two-stream auditory steady-state paradigm*

Jäger, M., Bleichner, M., Bauer, A.-K. R., Mirkovic, B., & Debener, S.

*Neural oscillations entrain their phase to high-level features of speech sound*

Zoefel, B., Costa-Faidella, J., Lakatos, P., Schroeder, C. E., & VanRullen, R.

*Cortical entrainment to music and its modulation by expertise*

Doelling, K. & Poeppel, D.

**Symposium: Visual Stimulation (18.09. 9:30Uhr)**

Session Chair: Annika Notbohm

*Modulation of behavioral measures of attention by visual entrainment in visual search*

Pastuszak, A., Hanslmayr, S., & Shapiro, K.

*To see or not to see: Observer-specific entrainment of alpha phase patterns predicts target detection*  
Brüers, S. & VanRullen, R.

*Auditory driven cross-modal phase reset of visual cortical oscillations*  
Prinsloo, K., Keitel, C., Thut, G., & Gross, J.

### **Symposium: Electrical Stimulation (18.09. 13:30Uhr)**

Session Chair: Johannes Voskuhl

*Modulating memory formation by entrainment of prefrontal beta oscillations using tACS*  
Braun, V., Kerlin, J., Stonkus, R., & Hanslmayr, S.

*Modulation of individual oscillatory frequency-peak by off-peak entrainment*  
Wolinski, N., Cooper, N., & Romei, V.

*Evaluating the effects of tACS on intrinsic functional connectivity*  
Williams, K., Cabral-Calderin, Y., & Wilke, M.

## **POSTER PRESENTATIONS**

*All posters will be displayed at both Session 1 (Thursday) and Session 2 (Friday), but you only need to present at your assigned session. You may bring your poster on Thursday while registering for the conference; poster boards will be available then. Numbers assigned below will be on the poster boards. The size of your poster must be 841 x 1189 mm (A0, portrait format).*

### **Poster Session 1 (17.09. 18:00Uhr; Foyer)**

1. *In search for optimal auditory steady state eliciting stimuli: clicks and flutter amplitude modulated tones*

Voicikas, A., Niciute, I., Ruksenas, O., & Griskova-Bulanova, I.

2. *Gap detection thresholds are determined by oscillatory activity in the auditory cortex*

Baltus, A., & Herrmann, C. S.

3. *Influence of attention on speech-rhythm evoked potentials: first steps towards an auditory brain-computer-interface driven by speech*

Da Silva Souto, C. F., Lüddemann, H., Lipski, S., Dietz, M., & Kollmeier, B.

4. *EEG loudness correlate for music*

Schmidt, F., Kollmeier, B., & Uppenkamp, S.

5. *Theta oscillations regulate speed of locomotion via hippocampus to lateral septum pathway*

Bender, F., Gorbati, M., Carus Cadavieco, M., Denisova, N., Gao, X., Holman, C., Korotkova, T., & Ponomarenko, A.

6. *The metric structure of drum rhythms modulates neural oscillations*

Stupacher, J., Witte, M., Hove, M. J., & Wood, G.

7. *BOLD signal effects of alpha tACS: a concurrent tACS-fMRI study*

Voskuhl, J., Huster, R., & Herrmann, C. S.

8. *Improved phonetic categorization in healthy older adults after 40 Hz transcranial alternating current stimulation (tACS)*

Rufener, K., Zaehle, T., Oechslin, M. S., & Meyer, M.

9. *In-Ear-EEG indicates neural signatures of effortful auditory processing*

Fiedler, L., Lunner, T., Brandmeyer, A., Wöstmann, M., Graversen, C., & Obleser, J.

10. *Investigation of the physiological mechanisms of  $\beta$ - and  $\gamma$ -frequency tACS using TMS*

Nowak, M., Hinson, E., Brown, P., & Stagg, C. J.

11. *Perceived duration of isochronous sequences: Is there a link between neural entrainment and temporal judgments?*

Horr, N., Wimber, M., & Di Luca, M.

12. *Enhanced low beta EEG activity precedes successful interruption of rhythmic finger tapping*

Fischer, P., Tan, H., Pogosyan, A., & Brown, P.

13. *Alpha oscillations are modulated by expectations in time for touch but not for vision*

Mühlberg, S., Torralba, M., Ruzzoli, M., Gross, J., & Soto-Faraco, S.

**Poster Session 2 (18.09. 11:00Uhr; Lecture Hall)**

14. *Can lateralised transcranial alternating current stimulation at alpha frequencies induce visuospatial bias?*

Vossen, A., Ayoub, A., Gross, J., & Thut, G.

15. *The effects of audio-visual synchrony on forming multisensory associations in episodic memory*  
Clouter, A., Shapiro, K., Hanslmayr, S.

16. *Cortical oscillations underlying implicit and explicit memory*  
Gert, A. L., Gruber, T.

17. *The more the better: Stronger phase entrainment over time predicts gap listening performance*  
Bauer, A.-K. R., Jäger, M., Thorne, J. D., & Debener, S.

18. *Rhythmic visual stimulation entrains brain oscillations in the parietal cortex*  
Notbohm, A., Kurths, J., & Herrmann, C. S.

19. *Premotor EEG beta-band activity encodes choice in tactile decisions independent of motor response*  
Herding, J., Spitzer, B., & Blankenburg, F.

20. *Assessing the influence of auditory attention on sentence recognition using neural entrainment*  
Mueller, J., Kollmeier, B., Debener, S., & Brand, T.

21. *Beat frequency entrains visual processing during free viewing*  
Maróti, E., Weiss, B., Knakker, B., & Vidnyánszky, Z.

22. *Sensory entrainment by motion cues: Automatically driven visual benefits from spatial extrapolation vs. temporal anticipation are partially independent*  
Ahrens, M.-M., Veniero, D., Harvey, M., & Thut, G.

23. *Flowtin – auditory alpha entrainment for tinnitus relief in patients with hyperacusis*  
Neff, P., Schlee, W., Kleinjung, T., & Meyer, M.

24. *Cortical time-frequency representation: Effect of stimulation mode and experience*  
Yusuf, P. A., Hubka, P., Tillein, J., & Kral, A.

25. *Individual alpha frequency predicts effects of flicker on spatial attention*  
Gulbinaite, R., van Viegen, T., Cohen, M. X., & VanRullen, R.

26. *Neural sources of beta band activity during bimanual coordination*  
Rueda-Delgado, L. M., Mantini, D., Daffertshofer, A., & Swinnen, S. P.