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 Vosskuhl

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
Vosskuhl, 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 β- and γ-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

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.