


*29th Annual Meeting of the International Society for Psychophysics*



# *Fechner Day*

---

**2013**



*Freiburg i.Br. (Germany)  
21 – 25 October 2013*

**Conference schedule**

Conference venue:

**Hotel Rheingold**

Eisenbahnstr. 47, 79098 Freiburg i. Br.

*Tel. +49 (0)761 28210*

*info@rheingold-freiburg.de*

*www.rheingold-freiburg.de*

*Note:* All conference sessions and the business meeting of the ISP will be held in *Hotel Rheingold*. Opening Ceremony (Monday, Oct 21) will take place in *Historisches Kaufhaus*, Münsterplatz 24, 79098 Freiburg. Gala Dinner (Thursday, Oct 24) will take place in *Restaurant Dattler*, Am Schlossberg 1, 79104 Freiburg.

---

## Monday, October 21

15:00 – 18:00 Registration

18:30 – 22:00 Opening Ceremony in *Historisches Kaufhaus*

---

## Tuesday, October 22

08:45 – 09:00 Welcome & Announcements

09:00 – 10:45 Theme session 1 (organized by M. Wittmann)

***Effects of movement, emotion, and embodiment on the perception of time***

D. Zakay, G. Mioni: *Movement and speed associated with a stimulus affect the estimation of its duration*

Zh. Shi: *From eye to hand: Implicit enaction expands subjective tactile duration*

J. L. O. Bueno, F. C. Nather: *Aspects of emotional contents and movement perception on subjective time experience*

A. Giersch, C. Duval, R. L. Capa: *Temporal order judgments are impaired in patients with schizophrenia: A link with emotional withdrawal?*

10:45 – 11:15 Coffee break

11:15 – 12:45 Free talks 1

Y. Nakajima *et al.*: *Perceptual processing of pairs of acoustically marked time intervals: Correspondence between psychophysical and electrophysiological data*

T. Kishida, Y. Nakajima, K. Ueda: *Effects of elimination of power-fluctuation factors from critical-band noise-vocoded speech*

J. R. Schoenherr, J. Logan: *Attention and working memory as determinants of identification thresholds for non-native speech sounds*

L. Fostick, H. Babkoff: *Individual differences in auditory spectral temporal order judgments*

12:45 – 14:00 Lunch break

14:00 – 15:45 Theme session 2 (organized by W. Skrandies)

***Perception, cognition, and human brain electrical activity***

W. Skrandies: *Perception, cognition, brain activity: Introductory remarks*

J. Kornmeier, M. Bach: *EEG correlates of multistable perception*

W. Skrandies: *Electrophysiological studies on perception and learning*

Th. Koenig *et al.*: *Agency and ownership are independent components of auditory-verbal self-monitoring*

H. Witte: *Methodological aspects of connectivity analyses of the neuromatrix of pain*

15:45 – 16:15 Coffee break

- 16:15 – 18:00 Poster session 1  
[List of individual presentations on page 7]
- 18:30 – 20:00 Social program: Guided tour through historical Freiburg

---

## Wednesday, October 23

- 08:55 – 09:00 Announcements
- 09:00 – 10:45 Theme session 3 (organized by H. Atmanspacher)  
***Complementarity in cognition***  
H. Atmanspacher: *Order effects in sequential measurements of non-commuting psychological observables*  
J. Busemeyer: *Quantum models of cognition and decision*  
P. beim Graben: *Complementarity in cognition entailed by bounded rationality*  
Th. Filk: *The relevance of Bell-type inequalities for mental systems*
- 10:45 – 11:15 Coffee break
- 11:15 – 12:15 Plenary lecture by Gary Hatfield  
***Why does perceptual realism matter?***
- 12:15 – 12:45 Group photograph
- 12:45 – 14:00 Lunch break
- 14:00 – 16:00 Theme session 4 (organized by D. Oberfeld)  
***Estimating the sensitivity in discrimination tasks: Recent challenges and advances***  
R. Ulrich, D. Vorberg: *Estimation of discrimination performance in 2AFC tasks: Pitfalls and improved estimators*  
Å. Hellström, Th. H. Rammsayer: *Weber Fractions and Time-Order Errors for long and short durations: Implications for modeling*  
R. Balk, F. Klöckner, D. Oberfeld: *A new look on “order effects” and sensitivity in two-interval discrimination tasks: Decisions weights and internal noise*  
O. Dyjas, K. M. Bausenhardt: *Mechanisms of stimulus discrimination: Evidence from the Type B effect*  
M. A. García-Pérez, E. Peli: *An “I can’t tell” response option prevents artifactual overestimation of the difference limen in bisection tasks*  
R. Alcalá-Quintana, M. A. García-Pérez: *Effects of criterion changes on estimates of the difference limen*
- 16:00 – 16:30 Coffee break
- 16:30 – 18:15 Poster session 2  
[List of individual presentations on page 8]

---

## Thursday, October 24

- 08:40 – 08:45 Announcements
- 08:45 – 10:45 Theme session 5 (organized by D. Kleinböhl)  
***System identification in the psychophysical assessment of nociception***  
D. Kleinböhl: *On the road to system identification: Psychophysical assessment of nociceptive mechanisms*  
J. R. Buitenweg, H. G. E. Meijer: *PaINSIGHT: Evaluation of nociceptive function from a system theory perspective*  
R. J. Doll, H. G. E. Meijer, J. R. Buitenweg: *Multiple threshold tracking methods for improved observation of nociceptive function*  
H. Yang, H. G. E. Meijer, J. R. Buitenweg: *System identification of the nociceptive function*  
J. L. Hay, G. J. Groeneveld: *The evaluation of nociceptive function during early clinical drug development*
- 10:45 – 11:15 Coffee break
- 11:15 – 12:45 Free talks 2  
J. Townsend, K. Salibayeva: *Let's face it: Attempted incipient unification of differential geometric and dynamic concepts of facial expressions*  
W. Ehm, J. Wackermann: *Hyperbolic geometry of Ehrenstein–Orbison type illusions*  
H. Colonius, E. N. Dzhafarov: *Ultrametric Fechnerian scaling*  
E. N. Dzhafarov, H. Colonius: *G. Th. Fechner: Correcting historical misrepresentations*
- 12:45 – 14:00 Lunch break
- 14:00 – 15:30 Free talks 3  
S. Link: *The circle of similarity*  
V. Shakuf, D. Algom: *Who neglects base rate, perceivers or investigators: The effect of base rate on Stroop and Garner effects*  
T. L. Hubbard: *Is the flash-lag effect a special case of representational momentum?*  
M. A. Elliott *et al.*: *Golden Section effects in visual cognition: A signature for complex-system organization?*
- 15:30 – 16:00 Coffee break
- 16:00 – 17:15 ISP Business meeting
- 18:45 – 22:00 Gala Dinner in Restaurant *Dattler* on the Schlossberg

---

## Friday, October 25

- 09:10 – 09:15 Announcements
- 09:15 – 11:00 Special symposium (organized by J. Wackermann and H. Siemsen)  
***Ernst Mach's legacy: Psychophysics and beyond***  
K. Thoma: *Ernst Mach – examples of his scientific work in the area of applied physics and measurement techniques*  
M. Heidelberger: *Mach on Helmholtz on acoustics*  
E. C. Banks: *Mach on 'monocular stereoscopy'*  
J. Wackermann: *Mach's concept of phenomenological science, and its relevance for psychophysics*
- 11:00 – 11:30 Coffee break
- 11:30 – 12:45 Special symposium (cont'd)  
B. Henning: *Mach and Schlick on simplicity in science*  
K. H. Siemsen: *Mach at younger ages, his research on psychophysics, his subsequent world view and his contribution to education*  
H. Siemsen: *Psychophysics as world view: Ernst Mach's sensualism, gestalt and erkenntnis-theory*
- 12:45 – 14:00 Lunch break
- 14:00 – 15:30 Free talks 4  
B. Estner, Th. Lachmann: *Spatial representations of numerical and non-numerical quantities in the auditory domain: Pitch and number*  
Th. Schmidt: *Measuring unconscious cognition without unconscious stimuli: Beyond the zero-awareness criterion*  
P. Hannan, E. Galanter: *A psychophysical approach to early human development*  
V. Sarris: *The relational psychophysics paradigm: "Task switching" and data variability in comparative-developmental studies*
- 15:30 – 16:00 Coffee break
- 16:00 – 17:30 Free talks 5  
F. Müller *et al.*: *Quantifying mental strain required to carry out everyday activities: German, Japanese and Canadian students*  
T. Jauhiainen, D. Schaffrath: *Jrjö Reenpää and psychophysics*  
R. Luccio: *The 'alley problem': A neglected debate on size–distance invariance in the XVII and XVIII centuries*  
H. E. Ross, G. L. J. Schönbeck: *The excursions of Galileo Galilei (1564–1642) into the moon illusion*
- 17:30 – 17:45 Farewell & closing

- 1 R. Bååth, G. R. Patching: *Separating predictive responses from reactive responses in isochronous finger tapping using Bayesian hierarchical modelling*
- 2 J. Birkenbusch, W. Ellermeier, F. Kattner: *Octuplicate this interval! – Empirical evaluation of the monotonicity, commutativity and multiplicativity of ratio productions of duration*
- 3 N. Borter, S. Troche, Th. H. Rammsayer: *A fixed-links modeling approach to elucidate measurement impurity in reaction time data*
- 4 J. L. O. Bueno, A. Parreira: *Effects of syntactic and semantic information in music composition on subjective perception of time*
- 5 A. Calderon *et al.*: *Birds of a feather who flock together still don't assimilate*
- 6 E. A. Firmino, J. L. O. Bueno: *Musical tonal modulation between minor keys and subjective time*
- 7 D. Fitousi: *Object-based attention: A General Recognition Theory approach*
- 8 L. Fostick: *Short-term learning effect in different psychoacoustic measures*
- 9 P. Hannan: *A case study of time perception in the high level gymnast*
- 10 E. Hasuo *et al.*: *The filled duration illusion with the method of adjustment when filled vs. empty comparison intervals are used*
- 11 G. Mioni, F. Stablum, S. Grondin: *Spatial compatibility in duration discrimination with manual and vocal responses*
- 12 N. Nunberg, D. Algom: *Stand by your Stroop: The Stroop effect decreases in a standing position*
- 13 S. Parker *et al.*: *Context effects in estimates on objective scales: Scale distortion?*
- 14 G. R. Patching, R. Bååth: *Assessing response times and force of responses to the size and brightness of visual stimuli*
- 15 P. Poncelet, A. Giersch: *Implicit coding of the temporal structure of events*
- 16 Th. H. Rammsayer, M. Verner: *On the effect of nontemporal stimulus magnitude on perceived duration as assessed by the method of temporal reproduction*
- 17 B. Schneider, M. Avivi Reich, M. Mozuraitis: *Detecting and measuring auditory-cognitive interactions in speech recognition*
- 18 V. Shakuf, F. Kutzner, K. Fiedler: *A fresh look at an old concept: Selective attention to aspects of a stimulus*
- 19 D. B. Terhune, S. Russo, R. Cohen Kadosh: *Visual cortex GABA predicts perceived duration*
- 20 K. Ueda, Y. Nakajima, T. Fujioka: *Factor analyses of power fluctuations in spoken sentences of eight languages: Analyses of individual data*
- 21 A. Vallesi *et al.*: *Cultural modulations of space-time compatibility effects*
- 22 K. M. Varadarajan: *Anti-mirror neuron system model for affordance based k-TR Common Coding Theory*
- 23 M. Verner, Th. H. Rammsayer: *Does perceived duration depend on physical and numerical stimulus magnitudes?*

- 1 R. Actis-Grosso, P. Ricciardelli: *Static faces, dynamic bodies: The recognition of emotions in typically-developed individuals and high-functioning autistic adults*
- 2 E. Borg, G. Borg: *How well does the Wong–Baker FACES scale identify the variation of pain?*
- 3 E. Borg: *Perception of blackness as a training material for the Borg CR100 Scale®*
- 4 J. C. Gonçalves *et al.*: *A Functional Measurement approach to the Child Anxiety and Pain Face Scale*
- 5 T. Gur, L. Niv, D. Algom: *Losing ground: The perception of height is affected by the makeup of the ground beneath*
- 6 T. L. Hubbard, S. E. Ruppel: *Effects of contrast and background on visual representational momentum*
- 7 E. A. Marsja *et al.*: *Maintenance of the distractive effect of deviating vibrotactile stimuli in a cross-modal oddball paradigm*
- 8 I. C. Martins, A. M. Oliveira, B. Steenbergen: *Motion extrapolation in people with motor constraints: Evidence for embodiment*
- 9 I. C. Martins, A. M. Oliveira, B. Steenbergen: *Representational momentum in people with cerebral palsy: Effects of response format and delay imposed on the response*
- 10 T. Miyaoka: *Measurements of distinguishing abilities of clothed buttocks*
- 11 J. S. Monahan: *Intermediate effects of spatial training women’s Mental Rotation Test scores*
- 12 A. M. Oliveira *et al.*: *Metric effects of taking tears out of the Wong–Baker Faces Pain scale*
- 13 J. Schlittenlacher, A. Kern, W. Ellermeier: *Extracting salient perceptual features of machinery noise using triadic comparisons*
- 14 J. R. Schoenherr: *The centrality of psychophysics to psychology: A Hephaestian paradigm*
- 15 V. M. Shendyapin: *Computational modeling of correct responses proportion among confident ones in “greater–lesser” task*
- 16 N. G. Shpagonova, V. A. Sadov, D. L. Petrovich: *Storage: The standard features in memory*
- 17 A. C. Silva, A. M. Oliveira: *Faces contextualized by faces: The similarity effect in face–context integration*
- 18 I. G. Skotnikova: *Visual discrimination asymmetry: Decision making criterion, time order error*
- 19 R. M. Tristão *et al.*: *Habituation versus sensitization to pain by newborns*
- 20 M. Vicovaro *et al.*: *Randomly interleaved staircases and “acceptance thresholds” in computer graphics experiments*
- 21 M. Wagner, T. Elbaum: *Haptic sensation elicited by visual stimulation: The “feeling by seeing” procedure*

*Note:* In order to save print space, author lists longer than three names are abbreviated to the first author’s name + *et al.* Complete lists of author names and their respective affiliations are given in the Proceedings book.