

## 29. ICP 2008 (Berlin) Symposium

### Title: Judgments of Frequency and Duration

Convenor: Isabell Winkler (Chemnitz University of Technology, Germany)

Contributors:

1. Thorsten Pachur (University of Basle, Switzerland):  
Cue and instance sampling in judgments of event frequencies
2. Tilmann Betsch (University of Erfurt, Germany):  
Storage of experienced frequency and duration
3. Isabell Winkler (Chemnitz University of Technology, Germany):  
When longer is more: An applied analysis on the interdependence of frequency and duration processing
4. Frank Renkewitz (University of Erfurt, Germany):  
The impact of encoding strategies on the interdependence of time and frequency processing
5. Peter Sedlmeier (Chemnitz University of Technology, Germany):  
PASS-T: An associative learning model that simulates judgments of frequency and duration

Discussant: Andreas Glöckner (Max Planck Institute Bonn, Germany)

### Abstract

Frequency and duration are key units of the empirical world. They are of fundamental importance in behavioral adaptation. The workshop presents new empirical results and theoretical approaches on judgments of frequency and duration. The contribution by Pachur examines the roles of two cognitive mechanisms of frequency estimation. Betsch, Winkler, and Renkewitz show how judgments of frequency and duration influence each other under certain circumstances. Finally, Sedlmeier's model provides a basis for explaining both judgments about frequency and time. In sum, the objective of the workshop is to analyze memory and judgment mechanisms underlying estimations of quantity.

### **When longer is more: An applied analysis on the interdependence of frequency and duration processing**

(Isabell Winkler & Peter Sedlmeier)

Typically, judgments of duration are influenced by the frequency of stimuli but the reverse does seldom hold. This might, however, be due to the relatively artificial stimuli commonly used, which could prevent a thorough encoding of their duration. Two studies examined the relationship between stimulus frequency and duration in realistic situations. In Study 1, participants watched a traffic video including waiting situations. In Study 2, participants working on a task were interrupted by pop-ups of varying frequency and duration. Contrary to former findings, frequency judgements are influenced by stimulus duration, presumably because of the participants' higher attention to this variable.