

FECHNER DAY 2010

SCIENTIFIC PROGRAM AND MEETING SCHEDULE

150th anniversary of the appearance of Fechner's "Elements of Psychophysics"

October 19th, 2010

Note: The following is a provisional schedule of events and is subject to change.

08:30 – 10:00 Registration

10:00 – 10:20 **Giulio Vidotto, Alessia Bastianelli**

Welcome to Fechner Day 2010: Psychology and Psychophysics in Padua

Free Talks:

10:20- 10:40 **Giovanni Bruno Vicario**

About Psychophysics and Fechner

10:40 – 11:00 **Bruce A. Schneider, Scott Parker**

The evolution of Psychophysics: From sensation to cognition and back again

11:00 – 11:20 **Riccardo Luccio**

Fechner's Seelenfrage: The Place of the Soul in Psychology

11:20 – 11:40 **John S. Monahan**

The Effects of Incongruent Probability , Response Mode, and Stimulus Set on RT

11:40 – 12:00 **Ragnar Steingrimsen, R. Duncan Luce**

The Commutative Rule as a New Test for Additive Conjoint Measurement: Theory and Data

12:00 – 12:20 **Pasquale Anselmi, Luca Stefanutti, Egidio Robusto**

Identifiability and Goodness of Recovery in the Constrained Gain-Loss Model

12:20 - 12:40 **William M. Petrusic**

Comparing and Estimating Efforts

12:40 – 14:10 Welcome Buffet (Courtesy of the Department of General Psychology- University of Padua)

14:10 – 14:30 **Kazuo Ueda, Yoshitaka Nakajima, Yu'ichi Satsukawa**

Effects of Frequency-Band Elimination on Syllable Identification of Japanese Noise-Vocoded Speech: Analyses of Confusion Matrices

14:30 – 18:00

Theme session: “**Matching Regularity and Fechnerian Scaling**”

Organiser: **Ehtibar Dzhafarov**

& Rocío Alcalá-Quintana

- **Janne V. Kujala, Ehtibar N. Dzhafarov**
Using Well-Behaved Thurstonian-type Models to Emulate Regular Minimality
- **Ali Ünlü, Matthias Trendtel**
Testing for Regular Minimality
- **Thomas Kiefer, Ali Ünlü**
Fechnerian Scaling of IRT Model for Dichotomous Data

16:00 – 16:30 Coffee break

- **Matthias Trendtel, Ali Ünlü, Ehtibar N. Dzhafarov**
With What Probability Regular Minimality can be Satisfied by Change?
- **Rocío Alcalá-Quintana, Miguel A. García-Pérez**
Order Effects in Two-Interval Forced-Choice Detection Tasks
- **Miguel A. García-Pérez, Rocío Alcalá-Quintana**
Order Effects in Two-Interval Forced-Choice Discrimination Tasks: Data and Model

08:30 – 10:30

Theme session: “Frontal slope perception – bias and discrimination”

Organiser: **Helen E. Ross**

- **Frank H. Durgin, Zhi Li**
Angular Overestimation Enhances Coding Precision: Scale Expansion Theory in Slant Perception
- **Alen Hajnal, Blake Watkins, Nicholas Jordan, Jordan Morrow, David Bunch, Attila Farkas**
Influence of Ground Surface on Slant Perception
- **Tiziano Agostini, Catina Feresin, Nila Negrin-Saviolo**
Kinesthetic and Visual-Kinesthetic Perception of Inclination: Testing the Validity of the Paddle Method
- **Helen Ross**
Perspective Effects in Frontal Slope Perception

10:30 – 11:00 Coffee Break

Free Talks:

- 11:00 – 11:20 **J. Scott Jordan, Andrew Kenning, Jim Clinton, Justin Durtschi**
Spatial Perception During Control with Another: the 'Other' as Potential Perturbation
- 11:20 – 11:40 **Timothy L. Hubbard, Susan E. Ruppel**
Effects of Temporal and Spatial Separation on Velocity and Strength of Illusory Line Motion
- 11:40 – 12:00 **Rossana Actis-Grosso, Alessia Bastianelli**
Perceiving Objects Moving Through Space and Time: “Where” and “When” are Intertwined
- 12:00 – 12:20 **Mark A. Elliott**
Temporal Structure and Inner Psychophysics: A Glimpse of Equilibrium?
- 12:20 – 12:40 **Diana Kornbrodt, Rachel M. Msetfi, Robin A. Murphy**
Tempus non Fugit? Effects of Depression, Attention and Memory on Time Perception
- 12:40 – 13:00 **Dan Zakay**
Time Perception in Meta-Cognitive Processes

13:00 – 14:00 LUNCH (Courtesy of the Faculty of Psychology)

- 14:00 – 14:20 **Joseph Glicksohn, Tal Dotan Ben-Soussan, Aviva Berkovich Ohana, Abraham Goldstein, Opher Donchin**
Time Production, Peak Alpha Frequency, and Sex Differences: The Plot Thickens

14:20 – 14:40 **Naoyuki Osaka, Hiroyuki Tsubomi, Takashi Ikeda, Mariko Osaka**
fMRI BOLD Signal Changes as a Power Function of Luminance: An internal Psychophysics Approach

14:40 – 17:00

Theme session: *Wave-like Representation and Discrete Processing of Information: Theories and Data*

Organisers: **Hans-Georg Geissler & Stephen W. Link**

- **Stephen W. Link**
Wave Theory: A (non-random) Walk through Essentials, Expansions and Open Issues
- **Hans-Georg Geissler**
TQM as a Tool to Enquire into Cyclic Structures in Mental Timing

15:40 – 16:00 Coffee Break

- **Jerome R. Busemeyer , James T. Townsend**
What is the Evidence for Quantum like Interference Effects in Perception?
- **Hans-Georg Geissler, Vygandas Vanagas, Joachim Stebel**
Cascaded Biological Rhythms in Human Cognition. A short virtual tour through hidden materials from the last 8 decades

17:00 – 17:40 Round Table Discussion

17:40 – 18:40 Poster Session 1

08:30 – 10:30

Theme session: **“Social Cognition: Psychophysics, Brain Imaging and Gender Effects”**

Organiser: **Marina Pavlova**

- **Arseny A. Sokolov, Samuel Krüger, Marina Pavlova**

Sex Differences in Body Language Reading

- **Kevin Pelphrey**

Sex Differences in the Development of Brain Mechanisms for Social Perception

- **D.E. Re, R. Whitehead, I.D. Stephen, D.I. Perrett**

Colour Thresholds for Social Judgments about Health and Attractiveness

- **Alice Mado Proverbio**

Electrical Neuroimaging Evidences of Sex Differences in Social Cognition: Face Processing

10:30 – 11:00 Coffee Break

Free Talks:

11:00 – 11:20 **Jiri Wackermann**

Geometric-Optical Illusions: A Pedestrian's View of the Phenomenal Landscape

11:20 – 11:40 **Tandra Ghose, Janelle Liu, Philip J. Kellman**

Measuring Size of Never-Presented Object: Visual Object Formation Through Spatiotemporal Interpolation

11:40 – 12:00 **Andrea Facoetti, Enrico Giora, Luca Ronconi, Milena Ruffino, Simone Gori**

Children Affected by Developmental Dyslexia Show Reduced Sensitivity to Visual Motion Illusions

12:00 – 12:20 **Andrea Spoto, Davide Massidda, Alessia Bastianelli, Rossana Actis-Grosso, Giulio Vidotto**

The Poggendorff Illusion with Anomalous Surfaces: A Comparison Between Constant Stimuli and the Adjusted Methods

12:20 – 12:40 **Daniela Bressanelli, Simone Gori**

From Impossible to Possible Thanks Motion: a New Transparency Effect

12:40 – 13:00 **Simone Gori, Enrico Giora, Tiziano Agostini**

The Strength of a Visual Illusion Measured by a Related Illusory Phenomenon

13:00 – 14:00 Lunch (Courtesy of the Faculty of Psychology)

Free Talks:

14:00 – 14:20 **Vladimir Zotov, Samuel Shaky, Anthony A. J. Marley**

*Absolute Production as a Possible Method to Externalized the Properties of Context
Dependent Internal Representation*

14:20 – 14:40 **Viktor Sarris, Petra Hauf**

*Relational Stimulus Generalization and Transposition in the Young Chickens'
Psychophysics: Within or Between Designing*

14:40 – 15:00 **Giovanni Battista Rossi, Francesco Crenna**

Insight in Ratio Scales

15:00 – 15:20 **José Lino Oliveria Bueno, Alexandre Antonio Mateus Moisés**

How does Lullabies of Different Ethnicities Influence the Subjective Time Estimation?

15:20 – 15:40 **Hannes Eisler, Anna Eisler**

*Scalar Timing (Expectancy) Theory: A Comparison between Prospective and
Retrospective Duration*

15:40 – 16:40 Coffee Break and Poster Session 2

16:40 – 18:10 Business Meeting

20:30 Gala Dinner (Palazzo Orsato-Lazzara-Giusti del Giardino, Via San Francesco, 87,
downtown of Padua)

09:00 – 11:00

Theme session: *Capturing facial expressions by advanced measurement methods*

Organisers: **Galina V. Paramei**
& **Armando de Oliveira**

- **Åse Innes-Ker, Fredrik Björklund, Patrik Bratkovic**
Decoding Emotional Expressions: Interaction of Perceived Race and Implicit Racial Preferences
- **Armando de Oliveira, Ana Duarte, Nuno Teixeira, Miguel Oliveira**
From Facial Features to Facial Expressions: A Functional Measurement Approach
- **Bruno Rossion, Goedele Van Belle, Benjamin Votquenne, Philippe Lefèvre**
Holistic vs. Analytic Processing of Facial expression: Evidence from Gaze-Contingency and Acquired Prosopagnosia
- **Galina V. Paramei, David L. Bimler, Tolga Aykut**
Processing Chimeric Faces in Adolescents with Asperger Syndrome

11:00 – 11:30 Coffee Break

Free Talks:

- 11:30 – 11:50 **Kirk N. Olsen, Catherine J. Stevens**
On Cognitive and Sensory Explanations for Perceived Loudness Change in Response to Dynamic Acoustic Intensity
- 11:50 – 12:10 **Yoshitaka Nakajima, Tsuyoshi Kuroda, Tomomi Terada**
Auditory Events that Seem to be Formed by Illusorily from Offset Cue
- 12:10 – 12:30 **Emi Hasuo, Yoshitaka Nakajima, Kazuo Ueda**
Does Filled-Duration Illusion Take Place for Very Short Time Intervals?
- 12:30 – 12:50 **Sasha Sokolov, Pietro Guardini, Paul Enck, Marina Pavlova**
Abundant Primacy Effects in Magnitude Estimation of Loudness with Invariant Stimulus Range

13:00- 14:00 Lunch (Courtesy of the Faculty of Psychology)

Free Talks:

- 14:00 -14:20 **Gerald S. Wasserman, Amanda R. Bolbecker, Jia Li, Corrinne C.M. Lim-Kessler**
No Retinal Efference in Humans: An Urban Legend
- 14:20– 14:40 **Alba Grieco, Armando de Oliveria**
The Locus of Collinear Facilitation Effect in Texture Processing: an Early or Late Cortical Set?
- 14:40 -15:00 **Enrico Giora, Simone Gori**
Sensitivity to Textural Statistics Affects the Perceived Size of a Visual Object

15:00 -15:20 **Lior Cohen-Raz, Niva Goldstein, Yuval Wolf**

Serial Rapes in the Eyes of Potential Victims: Cognitive and Affective Reflections of Continuous Fear of Abuse

15:20 – 15:40 **Anne Giersch, Mitsouko van Assche, Weixin Wang, Laurence Lalanne**

The Anticipation Mechanisms in Temporal Event-Coding?

15:40 -16:00 **Gabriel Boud-Bovy, Elia Gatti**

The Contribution of Proprioception and Touch to the Perception of Weak Forces: Preliminary Results

16:00 – 17:00 Coffee Break and Poster Session 3

Free Talks:

17:00 -17:20 **Inbal Malachi, Yael Ben-Aarons, Yuval Wolf**

Proximity to Terrorist Attacks in the Eyes of Israeli Jews and Arabs

17:20 -17:40 **Daniela Di Menza, Chiara Gaino, Massimo Grassi Andrea Pavan**

The Perception of Approaching and Receding Audiovisual Objects

17:40 - 18:00 **Pearl S. Guterman, Robert S. Allison, Stephen Palmisano**

Using VPython for Psychophysics

19:00 – 21:00 Closing Buffet (Courtesy of the Department of Applied Psychology-
University of Padua, 3th floor Rinascente building, Piazza Garibaldi)

Guided Poster Session 1 – October 20th, 2010

- 1) **Amélie Pfäffli, Thomas H. Rammsayer.**
Evaluation of the Equivalence of two Different Methods of Threshold Estimations with Adaptive Psychophysical Procedures
- 2) **Christoph Zetzsche, Florian Röhrbein, Kerstin Schill.**
Weber's Law and the Statistics of the Natural Environment
- 3) **Mauro Antonelli, Verena Zudini.**
Fechner vs. Brentano: Their Unpublished Correspondence on Psychophysics
- 4) **Leonardo Gomes Bernardino, Bruno Marinho de Sousa, Sérgio Sheiji Fukusima.**
Psychophysical Method Comparison to Estimate Psychometric Functions for Visually Perceived Sizes.
- 5) **Sergio C. Masin, Stefano Rispoli.**
The Intuitive Law of Buoyancy
- 6) **Nuno De Sá Teixeira, Armando Mónica Oliveira.**
Aristotle versus Philoponus: A Functional Approach to the Intuitive Physics of Projectiles
- 7) **Birgitta Berglund, Anders Höglund.**
Psychophysics: Top-Down and Bottom-Up Enable 'Measuring the Impossible'
- 8) **Carmela Morabito, Mattia Della Rocca.**
Epistemological Models in Psychoacoustics: A Historical Overview
- 9) **Ana D. Silva, Armando Mónica O., Ricardo G. Viegas, Miguel Oliveira, Vladimiro Lourenço, Andres B. Gonçalves.**
The Cognitive Algebra of Prototypical Expressions of Emotion in the Face: One or Many integration Rules?
- 10) **Ricardo G. Viegas, Armando M. Oliveira, Ana Garriga-Trillo.**
Loss Aversion and the Locus of Nonlinearity in Decision under Risk: A Test between Prospect Theory and SP/A Theory with Functional Measurement
- 11) **Charalampos Karypidis, Antonia Colazo-Simon.**
Vowel Quality Decay and Perceptual Asymmetries in Light of the Neutralization Hypothesis
- 12) **Marcello Maniglia, Andrea Pavan, Gianluca Campana, Clara Casco.**
Effects of Fast Adaption with Complex Motion
- 13) **Hye Joo Han, Charles Viau-Quesnel, Zhuangzhuang Xi, Richard Schweickert, Claudette Fortin.**
Self-Timing in Memory and Visual Search Tasks
- 14) **Michele Sinico.**
Duration and Grouping in Auditory Events
- 15) **Valentina Robol, Clara Casco.**

Contextual Influences in Texture-Edge Discrimination

16) **Yaniv Mama, Daniel Algom.**

Salient Task-Irrelevant Stimuli Disrupt Orthogonal Information but Enhance Correlated Information

17) **Chihiro Saito, Tadayuki Tayama.**

The Mechanism of Interval Timing: Learning and Generalization Effect of Inaccurate Feedback

18) **Leonardo Gomes Bernardino, Bruno Marinho de Sousa, Sérgio Sheiji Fukushima.**

Brief Exposure of Pictorial Depth Cues Affects Perceived Sizes

19) **Merav Ben Nathan, Daniel Algom.**

Roving versus Fixed Standard in Numerical Comparisons: The Distance Effect Revisited

20) **Roberta Cermisoni, Rossana Actis-Grosso, Natale Stucchi, Mauro Antonelli.**

Space and Time in Benussi Tau Effect

Guided Poster Session 2 – October 21st, 2010

- 1) **Michele Vicovaro, Luigi Burigana.**
The Linear Integration Model of the Size-Weight Illusion: Estimating its Parameters by Optimal Linear Separation
- 2) **Miguel Pereira Oliveira, Armando Mónica Oliveira.**
The Joint Action of Severity and Prevalence of Drug Adverse Effects on Self-Medication Propensity: Varying the Information Presentation Format
- 3) **Giovanni B. Vicario, Atsushi Sakai.**
Temporal Segregation of Superposed Tones
- 4) **Florian Kattner, Wolfgang Ellermeier.**
Emotional Valence and Psychoacoustics of Irrelevant Speech
- 5) **Grazia Caporusso, Riccardo Luccio.**
Phenomenal Influences On Fröhlich Effect
- 6) **Nuno De Sá Teixeira, Timothy Hubbard.**
Auditory Motion and Visual Representational Momentum: Effects of Response Method
- 7) **Massimo Nucci, Giovanni Galfano, Massimiliano Pastore.**
Efficient or Inefficient Processing of Shadows? A change of Blindness Study.
- 8) **Patricia Stahn, Daniel Oberfeld.**
Sequential Streaming Reduces the Effect of Non-Simultaneous Masking on Auditory Intensity Resolution
- 9) **Francisco Carlos Nather, José L. Oliveira Bueno, Daniela C. Carvalho De Abreu, Matheus Machado Gomes.**
Body movements and Timing Estimation Related to Visual Observation of Different Images Representing Distinct Body Positions
- 10) **Werner Ehm, Michael Bach, Jürgen Kornmeier.**
Variability in Gamma Activity During Observation of Ambiguous Figures
- 11) **Thomas H. Rammsayer.**
The Effects of Sensory Modality and Type of Task on Discrimination of Durations Ranging from 400 to 1,400 Milliseconds
- 12) **Judith Haldemann, Thomas H. Rammsayer.**
A New Procedure for Psychophysical Assessment of Performance on Coincidence Timing: Evaluating the Effects on Duration of Target Presentation and Target Masking
- 13) **Elisabet Borg, Sofia Granberg.**
A Pilot study to Validate the Borg CR100 (centiMax) Scale®, on Mentally Stressful Stimuli

- 14) **Elisabet Borg, Mats E. Nilsson.**
A Study of Range Effects for the Borg CR100 (centiMax) Scale® and Magnitude Estimation in Loudness
- 15) **Katharina Weiß, Ingrid Scharlau.**
Temporal Order Judgments - A sensitive Measure for Measuring Perceptual Latency?
- 16) **Marco Tommasi, Silvia Errico.**
Frequency Effects and Measurement of Geographical Knowledge
- 17) **Thomas Lachmann, Cees van Leeuwen.**
Representational Economy, not Processing Speed, Determines Preferred Processing Strategy
- 18) **Vered Shakuf, Daniel Algom, Yaakov Kareev.**
True to Life. The Role of Base Rate and Word-Color Correlation in Engendering the Failure of Selective Attention
- 19) **Alessandro Carlini, Rossana Actis-Grosso, Thierry Pozzo.**
Localizing Objects and Time: A Computational Model Based on a Predictive Mechanism
- 20) **Roberto Burro, Ivana Bianchi, Ugo Savardi.**
Experimental Phenomenology and Phenomenological Psychophysics: The Perceptions of Contraries

Guided Poster Session 3 – October 22nd, 2010

- 1) **Tonya S. Pixton, Mats P. Englund, Åke Hellström.**
Perceived Degree and Detectability of Facial Happiness and Angriiness: The Role of Particular Stimuli
- 2) **Beatriz Gil-Gómez de Liaño, Juan Botella, David Pascual-Ezama.**
The Effects of Memory Load in Visual Search are Modulated by the Similarity between the Materials Involved
- 3) **Marco Vicentini, Marco Righele, Davide Zerbato, Diego Dall'Alba, Debora Botturi.**
Measuring Pliable Perception Capabilities in Teleoperated and Virtual Environments
- 4) **Rossana Actis-Grosso, Giovanni B. Vicario, Mario Zanolini.**
Apparent Transparency in Motion: Visual Phantoms and the Rosenbach Effect
- 5) **Michele Scandola, Alessia Bastianelli, Maria G. Panetta, Elisa Moretto.**
Comparison Between the Adjustment and Staircase Methods for Evaluating Body Size Distortion and Body Dissatisfaction.
- 6) **Davide Massidda, Alessia Bastianelli, Chiara Mazzone.**
Perceptual Body Distortion and Body Dissatisfaction: A Study Using Adjustable Partial Image Distortion
- 7) **Lucia Regolin, Orsola R. Salva, Elena Mascalzoni.**
Sensitivity to Social Visual Cues in the Domestic Chick
- 8) **Deirdre Twomey, Mark Glennon, Mark A. Elliott.**
Electrophysiological Correlates of Flicker-Induced Form Hallucinations
- 9) **Simon Grondin, Tsuyoshi Kuroda, Takako Mitsudo.**
Effect of the Space between Tactile Stimuli Making Empty Time Intervals on Duration Categorization.
- 10) **Yuki Ashitaka, Hiroyuki Shimada.**
Stroop Effect with Synonymous Homographic Heterophonemic Words in Japanese Kanji
- 11) **Hiroyuki Shimada, Yuki Ashitaka.**
Are Stroop Facilitation and Interference Effects Enhanced by an Accompanying Auditory Word?
- 12) **Olga Daneyko, Tiziano Agostini, Daniele Zavagno.**
Robustness of the Munsell Scale with Regards to Luminance Changes on its Background
- 13) **Custódio Vagner, Duarte Edison, Almeida José , Gorla José , Elias Robson, Menon Mario.**
Navigation of People with Visual Impairment in Natural Areas: A Study Through Independent Trekking with Adapted Remote Accompaniment

- 14) **José A. Lacerda de Jesus, Rosana M. Tristão, Marcos V. de Oliveira, Naiara Viudes, Mariana Afflalo, Leticia Marçal.**
Psychophysical Scales for Pain and Skin Conductance as Indicators of Acute Pain in the Neonate
- 15) **Mats P. Englund, Åke Hellström.**
Semantic Structure Causes Stimulus-Valence Dependent Presentation-Order Effects in Preference Comparisons
- 16) **Yves Lacouture.**
Long-term Representations in Absolute Identification
- 17) **Giulia Parovel, Daniela Bressanelli.**
Comic Perception and Incongruent Causal Events: The Role of Paradoxical Animacy
- 18) **Paul Mulcahy, Orsola R. Salva, Mark A. Elliott, Lucia Regolin.**
Structural Imbalance and Aesthetic Preference in Domestic Chicks
- 19) **Anna Eisler, Hannes Eisler.**
Time Perception in Children: Empirical Studies in a Developmental Approach
- 20) **Michael Davis Tira, Oliver Lindemann.**
Operational Momentum in Numerosity Production Judgment of Multi-Digit Number Problems, Evidence for Analogue Magnitude System