### Monday February 4

**Chair by B. Weil**

9:00-9:15 *Welcome* D. Goetz (Research Dir of MINES ParisTech) & *Introduction*, P. Le Masson, Y. Reich

9:15-10:15 *5 years of design theory SIG: results and perspectives* A. Hatchuel & Y. Reich,

- 10:15-10:45 *The Game between Institutions and Design*, S. Meijers, Y. Reich (Tel Aviv Univ) and E. Subrahmanian (CMU)

**Coffee Break**

**New Instruments for theory-driven experiments in design**

- 11:00-11:30 *A visual notation depicting C-K constructs in moment-to-moment concept generation interactions*, N. Sonalkar, A. Mabogunje, L. Leifer (Stanford Univ)

- 11:30-12:00 *Genetic Computation and design theory*, A. Kazakci (MINES ParisTech)

**Chair by A. Hatchuel**

**Knowledge production and design**

- 14:00-14:30 *Sketching for Thinking: On Paper and in the Air*, B. Tversky (Stanford Univ)

- 14:30-15:00 *Design Theory and new Objects of Science: from integrative to interdiscipline laboratory and vice-versa*, M. Mambrini (INRA), A.-F. Schmid (INSA Lyon and MINES ParisTech)

**Coffee Break**

**New systematic for design**

- 15:15-15:45 *Biomimetics*, O. Shai (Tel Aviv Univ), Y. Reich


16:15-18:00 *Three parallel exploratory workshops and open debate*

### Tuesday February 5

**9:00-11:15 FOUR WORKSHOPS IN PARALLEL**

- **Workshop 1**: social interactions in design (see next slide) (Introduction by J. Gero, report by K. El Qaoumi & S. Hooge)

- **Workshop 2**: Knowledge management and cognition (see next slide) (Introduction by P. Le Masson, report by O. Kokshagina)

- **Workshop 3**: Design Theory and framing (see next slide) (Introduction by P. Vermaas, report by C. Freitas & K. Levillain)

- **Workshop 4**: Design and identity of objects (see next slide) (Introduction by A. Gentes, report by F. Jean & I. Brown)

**Chair by E. Kroll**

- 11:30-12:00 *Workshops reports*

### JOINT SESSION Design Theory SIG and Design Creativity SIG

**Chaired by P. Le Masson**

- 13:30-14:30 *Robustness and Generativity* A. Hatchuel (MINES ParisTech), P. Le Masson (MINES ParisTech), Y. Reich (Tel Aviv Univ), B. Weil (MINES ParisTech)

  **Discussants**: A.M.M Sharif Ullah (Kitami Institute of Technology); E. Subrahmanian (CMU)

- 14:30-15:30 *Concept generation and design creativity* T. Taura (Kobé Univ), Y. Nagai (JAIST)

  **Discussants**: Todd Lubart (Paris Descartes Univ), Annie Gentes (Telecom ParisTech)

**Coffee Break**

- 15:45-16:45 *Cognition and creativity*, M. Agogué (MINES ParisTech), M. Cassotti (Sorbonne Univ)

  **Discussants**: Grégoire Borst (Sorbonne Univ), Frido Smulders (Delft Univ)

- 16:45-17:30 *Open discussion on SIG orientations*, Intro. by Y. Reich
Workshops – Tuesday February 5

WORKSHOP 1: Social interactions in design (20mn each presentation)
Chaired by A. Mabogunje, reported by K. El Qaoumi & S. Hooge - Introduction by J. Gero
- Social interactions in design, J. Gero (Krasnow Institute for Advanced Study)
- Specific characteristics of innovative design in agriculture: a distributed design of biotechnical objects, L. Prost, E. Berthet, M. Cerf, M.-H. Jeuffroy, J. Labatut, J.-M. Meynard, (INRA)
- Collaboration formats and creativity: A field study of video game design by professionals, A.-M. Hébert, F. Détienne, C. Licoppe (Telecom ParisTech)
- The dark side of the Swatch Design, G. Garel (CNAM)
- Social Interactions, Cognitive artifacts, Globalization and design theory, Y. Reich, E. Subrahmanian

WORKSHOP 2: Knowledge management and cognition in design (20mn each presentation)
Chaired by A. Kazakçi, reported by O. Kokshagina - Introduction by P. Le Masson
- How to improve research process resources qualification by adequate monitoring of research projects, I. de Fontaines (Eurocopter), D. Lefeuvre (Eurocopter), G. Prudhomme (Grenoble INP), M. Tollenaere (Grenoble INP)
- Improving Result Quality in Engineering Design by better linking employee’s and task’s features, J. Hinsch (RWTH Aachen), J. E. Heller, R. Djaloëis, C. Schlick, J. Feldhusen
- Experimenting C-K Theory in Design-Oriented Educational Context: Analysis of the Process Methodology, Results, and Lessons Drawn, P. Blanchard (EDNA), P. Corsi (IKBM)
- On Applying Design Thinking Methods Elsewhere: Context Matters, F. Smulders (Delft Univ)

WORKSHOP 3: Design theory and models (20mn each presentation)
Chaired by Y. Reich, reported by C. Freitas & K. Levillain - Introduction by P. Vermaas
- The missing goals of contemporary design, P. Vermaas (TU Delft)
- Explaining TRIZ model of contradictions with Pareto dominance model, Dubois (INSA Lyon)
- Coherence as Design Principle, L. Koutsoumpos (National TU Athens)
- Criteria and Design Alternatives – Evaluation and Comparison based on common design entities, A. Dentsoras (Patras Univ)
- C-K Mapping and Computational Perception, A. M. M. Sharif Ulah (Kitami Institut of Technology)
- Modelling pragmatic design moves with C-K theory, E. Kroll (Technion)

WORKSHOP 4: Design and identity of object (20mn each presentation)
Chaired by A. Hatchuel, reported by F. Jean & I. Brown - Introduction by A. Gentes
- Unstable meaning and constructive fixation: questioning object identity, M. Béjean (Paris Est Univ), A. Gentès, C. Jutant, C. Mivielle (Telecom ParisTech)
- From Foresight to Poetics: Opening Future (s), G. Amar (MINES ParisTech)
- Critical discourse in front of non descript objects, N. Thély (Rennes 2 Univ)
- In need of a new product-use ontology : the contributions of design theory, I. Brown, P. Le Masson, B. Weil (MINES ParisTech)
- The design of « narrative objects ». Reflections on the combination of the Design theory of objects (C-K theory) and the Design theory of the self as Narrative Identity (ipse-idem dialectic, Ricœur, 1990), C. Abrassart (Montreal Univ)