

Monday, January 31<sup>st</sup>





*Zoom link for the whole day*

11:45: Opening talk by the SIG Chairs

## Plenary Session: design theory and socio-ecological systems

Chair: Eswaran Subrahmanian / Chat moderator: Maxime Thomas

12:00-12:45	Reflections on the design of social-ecological systems: generation and emergence of entangled naturalities	Armand HATCHUEL <b>(MINES ParisTech)</b>
12:45-13:30	Designing for Assistive Technology	P. V. Madhusudhan Rao <b>(Indian Institute of Technology Delhi)</b>

  **13:30 – 14:00 break**  

## Plenary Session: design theory and the management of knowledge

Chair: Armand Hatchuel / Chat moderator: Raphaëlle Barbier

14:00-14:45	Information ecology, Category theory and Design	Eswaran SUBRAHMANIAN <b>(CMU)</b>
14:45-15:30	The hidden designers: when idea evaluators act as defixating leaders	Justine BOUDIER <b>(MINES ParisTech)</b> Alexandre Sukhov <b>(Karlstad University)</b>

  **15:30 – 16:00 break**  

Monday, January 31<sup>st</sup>

*Zoom link for the whole day*

## Plenary Session: design theory and education

Chair: Ehud Kroll / Chat moderator: Honorine Harlé

16:00-16:45	How design theory supports chemical engineering teaching and learning: empirical evidence from a French school of engineering	Olivier POTIER, Mauricio CAMARGO, Manon ENJOLRAS <b>(Université de Lorraine)</b>
16:45-17:30	Training researchers to foster innovation and interdisciplinary research programs for agriculture at INRAE	Elsa BERTHET Gwenael VOURCH Jean-Marc MEYNARD <b>(INRAE)</b>
17:30-18:15	Progress report of an EELISA community: the IDEEE initiative (Innovation and Design for European Engineering Education)	Frido Smulders, Gaetano Cascini, Kathrin Möslein, Paul Coughlan, Marial Elmquist, Antonio Fernandes, Pascal Le Masson, Maxime Thomas, Benoit Weil

  **18:15 – 18:45: break**  

## Plenary Session

Chair: Pascal Le Masson / Chat moderator: Caroline Jobin

18:45-19:30	The Design of Design	Neil GERSHENFELD <b>(Massachusetts Institute of Technology, Center for Bits and Atoms)</b>
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Tuesday, February 1<sup>st</sup>

Parallel session 1





Zoom link:

**DESIGN THEORY, ART AND PHILOSOPHY**

*Chair: Pascal Le Masson / Chat moderator: Agathe Gilain*

- 12:00-12:30: Understanding the pragmatic roots of design propositions - a culturalist approach. Albrecht Fritzsche (**Université Internationale de Rabat**)
- 12:30-13:00: Information Design and its relation to lived body. Yvonne Eriksson (**Mälardalen University**)
- 13:00-13:30: The role of the Peircean categories in design theory. Lauri Koskela (**University of Huddersfield**) Ehud Kroll (**ORT Braude College**)

12:00-15:15

  **13:30 – 13:45 break**  

- 13:45-14:15: Dynamic C-K Theory: Towards an Anthropological Understanding of the Role of Energy in Organizational Design and Capital Formation. Elissa Wickham (**Waseda University**) Ade Mabogunje, Larry Leifer (**Stanford University**)
- 14:15-14:45: Intention in Design: A Dialog into the Unknown. Anne-Françoise Schmid (**Chaire TMCI**), Muriel Mambrini-Doudet (**INRAE**), Eswaran Subrahmanian, Ira Monarch (**CMU**)
- 14:45-15:15: Care as a theory of design by moral imagination. Perspectives from Carol Gilligan and Joan Tronto. Christophe Abrassart (**Université de Montréal**)

  **15:15 – 15:45 Break**  

Parallel session 2





Zoom link:

**DESIGN THEORY AND INNOVATION, ENTREPRENEURSHIP AND EDUCATION**

*Chair: Frido Smulders / Chat moderator: Louise Taupin*

12:00-15:15

- 12:00-12:30: *AI-bility: Cultivating AI Awareness in Schoolchildren*. Leona Chandra Kruse (**University of Liechtenstein**)
- 12:30-13:00: *Entrepreneurship education by design: Combining C-K theory and co-evolution*. Jeroen Coelen Jeroen (**Entrepreneurship by Design Lab, Delft University of Technology**), Frido Smulders (**Technische Universiteit Delft**)
- 13:00-13:30: *Feasibility in Design*. Andreas Makoto Hein (**University of Luxembourg**)

  **13:30 – 13:45 break**  

- 13:45-14:15: *Improving MVP tests and scale-up phase of technological start-ups through the definition of a creation heritage*. Louise Taupin, Raphaëlle Barbier, Pascal Le Masson, Ellyn Redheuil, Blanche Segrestin, Chipten Valibhay, (**MINES ParisTech, PSL Université**)
- 14:15-14:45: *Scalability of generative knowledge management systems: designing for individuals' and institutions' mutual benefit*. Ulrich Schmitt (**University of Stellenbosch Business School**)

  **15:15 – 15:45 Break**  

### Parallel session 3





Zoom link:

#### DESIGN THEORY AND THE DESIGN OF POLICY

Chair: Sophie Hooge / Chat moderator: Nafissa Jibet

12:00-15:15

- 12:00-12:30: *A further advancement of the c-k theory-based tool for the innovative generation of policy alternatives.* Halil Berkay Tosunlu (**Université Paris Dauphine-PSL**), Joseph Guillaume (**The Australian National University**), Irene Pluchinotta (**University College London**)
- 12:30-13:00: *C-K theory in kindergarten “When a collective of 5-year-olds behaves like a mini learned society”.* Alberti-Ortheau Laurence (**Ministère de l'Education Nationale**), Ricci Nicolas (**ENS Paris-Saclay**), Dominique Lafon (**Cayak-Innov**)
- 13:00-13:30: *C-K<sup>E/I</sup>: A pragmatic framework for policy innovation.* Yves Meinard (**Université Paris Dauphine-PSL**) Irene Pluchinotta (**University College London**)

  **13:30 – 13:45 break**  

- 13:45-14:15: *Engineering in the territories, the side step Innovative conception of the Grand East Region's strategic project of “Territorial Manufacture”, France.* Eléonore Hauptmann (**Université Paris I - Panthéon-Sorbonne**)
- 14:15-14:45: *Redefining and reframing a city: co-designing a new city model in Venice.* Daniela Pavan, Cinzia Colapinto, Vladi Finotto, Fabio Pranovi (**University of Ca' Foscari**)
- 14:45-15:15: *Collective knowledge management in city planning: Building spatial-cognition ontologies from literary.* Maria Rosaria Stufano Melone (**Politecnico di Bari**)

  **15:15 – 15:45 Break**  

Parallel session 4

Zoom link:

**DESIGN THEORY AND DESIGN METHODS**

Chair: Chris McMahon/ Chat moderator: Chipten Valibhay

12:00-15:15

- 12:00-12:30: *Design benevolence value in digital services: A Case Study of COVID-19.* He Li, Federico Tajariol (**Université de Franche-Comté**)
- 12:30-13:00: *Embodied cognition of entrepreneurial value creation - a multi-modal study of discursive and material metaphors in ideation workshops.* Dirk Schneckenberg (**Rennes School of Business**)
- 13:00-13:30: *Generative abilities of a mock-up toolkit in co-design.* Aliénor Morvan, Stéphane Safin, Françoise Détienne (**Telecom Paris**)

  **13:30 – 13:45 break**  

- 13:45-14:15: *Product Development using 3D Printing Technology.* Sharifu Ura, Tomoya Kimura, Lukita Dea Kutari (**Kitami Institute of Technology**)
- 14:15-14:45: *Virtual Universe to explore the unknown.* Santha Kunjappy John Jacob (**Aix Marseille Université**)
- 14:45-15:15: *How to get a good idea in three steps.* Barbara Tversky (**Stanford University**)

  **15:15 – 15:45 Break**  

Parallel session 5




Zoom link:

**DESIGN THEORY AND COGNITION**

*Chair: John Gero / Chat moderator: Justine Boudier*

12:00-15:15

- 12:00-12:30: *Triple Process Theory meets Design Theory: Exploring Reflexive, Deliberate and Metacognitive Brain Activity in Design.* Sonia Vieira (**Politecnico di Milano**) Udo Kannengiesser (**Johannes Kepler University Linz**) Mathias Benedek (**Karl-Franzens-Universität Graz**)
- 12:30-13:00: *Hemispheric Asymmetry in Prefrontal Cortex for Design Problem Solving (or whatever happened to the left-brain engineer and the right-brain architect?).* Vinod Goel (**York University**)
- 13:00-13:30: *An Elementary Model for Metacognition in Design and Computational Results.* Marija Majda Perišić (**University of Zagreb**) Mario Štorga (**University of Zagreb, Luleå University of Technology**) John Gero (**University of North Carolina at Charlotte**)

  **13:30 – 13:45 break** 

- 13:45-14:15: *Measuring the structure and temporal evolution of the design space.* Julie Milovanovic, John Gero (**University of North Carolina at Charlotte**)
- 14:15-14:45: *What happens in the brain when designers generate concepts using TRIZ?* John Gero, Julie Milovanovic (**University of North Carolina at Charlotte**) Mo Hu, Tripp Shealy (**Virginia Tech**)
- 14:45-15:15: *Abstracting and formalizing the design co-evolution model.* John Gero (**University of North Carolina at Charlotte**) Udo Kannengiesser (**Johannes Kepler University Linz**) Nathan Crilly (**University of Cambridge**)

  **15:15 – 15:45 Break**  

Parallel session 6

Zoom link:

**DESIGN THEORY AND ECOSYSTEMS**

*Chair: Benoit Weil / Chat moderator: Antoine Bordas*

12:00-15:15

- 12:00-12:30: *Experimenting a Meta-method for Generic Societal Design Engineering: The Making of 21th Century Constitutional Things*. Patrick Corsi (**IKBM Sprl, Brussels**), Jacques De Gerlache (**GreenFacts & Institut Paul Lambin, Brussels**)
- 12:30-13:00: *Exploring Industry 4.0: Preliminary Design Theory Implications*. Rebecca Castagnoli (**University of Turin**) Julie Stal-Le Cardinal (**Université Paris-Saclay**) Giacomo Büchi (Monica Cugno (**University of Turin**))
- 13:00-13:30: *Measuring Innovation and Innovativeness - A data-mining approach*. Bernard Sinclair-Desgagné (**GREDEG**)

 **13:30 – 13:45 break** 

- 13:45-14:15: *On the incompleteness of AI in complex systems and designing for incompleteness*. Gunnar Holmberg (**Linköping University and Saab AB**), Nicolette Lakemond (**Linköping University**)
- 14:15-14:45: *Path dependency and ethical decision making in the development of complex products*. Claudia Eckert (**Open University**)

 **15:15 – 15:45 Break** 



## Parallel session 7




Zoom link:

### DESIGN THEORY AND MEDIUMS OF DESIGN

Chair : Annie Gentes / Chat moderator: Annie's thesard

- *The Design Turn for the Management of Public Relations: Emerging Challenges for Communication Professionals using Design Practices.* Niklas Henke, Fabienne Martin-Juchat (**Université Grenoble Alpes**)
- *Simulation by Design, a strategy to envision implications of emerging technologies through experience.* Ioana Ocnarescu (**Strate Ecole de Design**)
- *Singular Artwork, Multiple Medium(s).* Anitra Lourie, Ambre Charpier (**Université Paris I - Panthéon-Sorbonne, Télécom ParisTech**)

12:00-15:15

  **13:30 – 13:45 break**  

- *A dialogue between the “transformative practices” approach and the “transactional approach to design.* Manuel Zacklad (**CNAM**)
- *From a concept centered theory of design to a media centered theory of design.* Annie Gentes (**CY Cergy Paris Université**)
- *Involving healthcare professionals in the co-design process: How to build communicational sensitivity?* Marie-Julie Catoir-Brisson (**Audencia Business School, Université de Nîmes**), Sylvie Grosjean (**Université d'Ottawa**), Dany Baillargeon (**Université de Sherbrooke, Centre De Recherche sur le Vieillissement**)
- *Design as posture: Developing enlightened subjectivity with the philosophy of Yoga.* Estelle Berger (**Strate Ecole de Design**)

  **15:15 – 15:45 Break**  

Tuesday, February 1<sup>st</sup>

*Zoom link*

**Plenary Session: design theory the management of defixation**

Chair: Benoit Weil / Chat moderator: Alix Deval

15:45-16:30	Lock-in, fixation and the extinction of technologies: a design-theoretic view of sustainable transitions	Eswaran SUBRAHMANIAN <b>(CMU)</b> Yoram REICH <b>(Tel Aviv University)</b> Chris McMahon <b>(University of Bristol)</b>
16:30-17:15	Games and Simulation: how designing the exercise shape reality	Sebastian MEIJER <b>(KTH Royal Institute of Technology)</b>

  **17:15 – 17:30 Break**  

**Plenary Session: design theory and engineering design**

Chair: Eswaran Subrahmanian / Chat moderator: John Levesque

17:30-18:15	The Archimedes Code: A Dialogue between Science, Practice, Design Theory, and Systems Engineering	Yoram REICH <b>(Tel Aviv University)</b>
18:15-19:00	Design Theory and the Positioning of Engineering Design	Claudia ECKERT <b>(Open University)</b> Georges Fadel <b>(Clemson University)</b> Chris McMahon <b>(University of Bristol)</b>

**Chair: Eswaran Subrahmanian**

19 :00	Closing and Future Program
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