Programme	
Posters may be presented during the conference breaks and lunches.	

Thursday, June 13

	Room #1: amphithéâtre Bilsky-Pasquier	Room #2: amphithéâtre Gustave Roussy
8:30-9:00	welcome. Marie Curie room	welcome. Marie Curie room
9:00-10:00	**Plenary conference**: Anouk Barberousse. « **Models for non-modellers in climate science** » (chair: Marion Vorms)	
10:00 -10:30	break - Marie Curie room	break - Marie Curie room
	Session 1.1A: Reasoning with and about models (chair: Mauricio Suárez)	**Session 1.1B: Model transfers** (chair: Francesco Nappo)
10:30 - 11:10	**Michael Stoeltzner** — « The Lower Bound of Models »	**Peter Tan** — « Generality vs Analogy in Interdisciplinary Model Transfer »
11:10 - 11: 50	**Andre Curtis-Trudel, Darrell Rowbottom** — « Computational science and the problem of unconceived alternatives: lessons from gravitational-wave astrophysics »	**Chia-Hua Lin** – « Traveling templates: A case study of the Prisoner's Dilemma in cancer research »
11:50 - 12:30	**Benjamin Santos Genta** — « Two Kinds of Similarity Judgments in Reasoning from Models »	**Tarja Knuuttila, Maximilian Noichl & Andrea Loettgers** – « The Kuramoto model: The Biography of a Model Template »
12:30- 14:00	lunch (buffet) and posters - Marie Curie room	lunch (buffet) and posters - Marie Curie room
	Session 1.2A: Data and pictures (chair: Rawad El Skaf)	**Session 1.2B: Representating non-deterministic systems** (chair: James Fraser)
14:00-14:40	**Cyrille Imbert** — "Data as storage artefacts: a naturalist framework"	**Cedric Gaucherel** — « Epistemological consequences of Possibilistic models »
14:40-15:20	**Lorenzo Sartori** — « Why do we love pictures (for the wrong reasons): Scientific pictures, models, and their justification »	**Mike Miller** – « Representing Quantum Indeterminacy »
15:20- 15:50	break - Marie Curie room	break - Marie Curie room
	Session 1.3A: Emergence (chair: Nic Fillion)	**Session 1.3B: Data and measurements** (chair: Nadine de Courtenay)
15:50- 16:30	**Alexandre Guay & Olivier Sartenaer** – « Humphreys' transformational emergence and its (difficult) reception »	**Brigitte Falkenburg** - « Computer Simulation in Data Analysis: A Case Study from Particle Physics »
16:30- 17:10	**Robert Batterman** — « Autonomy, Emergence, and Deep Learning »	**Eran Tal** – « Measurement and the Riddle of Factuality
17:10 - 17:30	mini break	mini break
17:30 - 18:30	**Margie time**: **Mary Morgan, Yemima Ben-Menahem, Brigitte Falkenburg, Roman Frigg, Kirstin Borgerson, Eran Tal** (chair: Sorin Bangu)	

Friday, June 14

	Room #1: amphithéâtre Bilsky-Pasquier	Room #2: amphithéâtre Gustave Roussy
9:00-10:00	**Plenary conference: Nicolas Fillion. « Is perturbation the ugly duckling of mathematics? »** (chair: Isabelle Drouet)	
10:00 -10:30	break - Marie Curie room	break - Marie Curie room
	Session 2.4A: Explanation and understanding (chair: Maxime Hilbert)	**Session 2.4B: Machine Learning and IA** (chair: Nico Formanek)
10:30 - 11:10	**Philippe Huneman** – Complex systems and the case for structural explanations	**Eamon Duede** — « Novel Epistemological Predicaments for AI-Infused Science »
11:10 - 11: 50	**Oscar Westerblad** — « On primary and secondary scientific understanding »	**Juan Durán** – « On reliabilism as an epistemology for ML »
11:50 - 12:30	**Jim Woodward** - « There is no such thing as a statistical explanation »	**Emanuele Ratti, Alberto Termine, Alessandro Facchini** — « Theory-ladenness, Machine Learning, and Phenomenological Models »
12:30- 14:00	lunch (buffet) and posters	lunch (buffet) and posters
	poster#1: **Emma Cavazzoni, Sabina Leonelli** - « Model Systems Across the Lab and the Field: Organismal Samples »	poster#4: **Sadegh Mirzaee** - « Accommodation of Styles in the Modeling Space »
	poster#2: **Margarida Hermida, James Ladyman** - « Biophysics and the unity of science"	poster#5: **Nanxin Wei** - « The Story Behind and Beyond Minimal Models »
	poster#3: **Maxime Hilbert, Olivier Sartenaer** - « The Rise and Fall of a Myth about British Emergentism. Or Paul Humphreys' Missing History of Emergence »	poster#6. **Connie Knieling** - "Machine Learning Models as Minimal Data Models: Explanations without Representations?"
	Session 2.5A: Logic and mathematics (chair: David Waszek)	**Session 2.5B: Maxwellian Issues** (chair: Quentin Rodriguez)
14:00 - 14:40	**Matias Osta Vélez, Matteo De Benedetto** — « The Normative Dimension of Logical Modeling »	**Francesco Nappo** — « Maxwell on Geometrical and Physical Reasoning »
14:40-15:20	**Jacques Dubucs** — "Feasibility in Logic, Tractability in Mathematics"	**Mauricio Suárez** – « Maxwell's Theory is Maxwell's Equations: Abstraction as a Process »
15:20-15:50	break	break
	Session 2.6A: Climate Models and Measurements (chair: Héloïse Athéa)	**Session 2.6B: Physical models and their epistemic roles** (chair: Robert Batterman)
15:50- 16:30	**Matthias Ackermann** — « Navigating Uncertainty -- Climate Models as Epistemic Tools »	**Sorin Bangu** – « Reductionism, Constructionism and Explanation: The BCS model of Superconductivity »
16:30- 17:10	**Rawad El Skaf** — « Climate Change Socioeconomic Scenarios: How Thought Experiments, Computational Models and Controlled Experiments Meet »	**Quentin Rodriguez, Vincent Ardourel** — « What model is the "Ising model"? When a model fulfills different epistemic functions across history »
17:10 - 17:30	break	break
17:30 - 18:30	**Plenary conference**: Emily Sullivan: « **Machine Learning in science: Dimensions of understanding** » (chair: Cyrille Imbert)	
19:30	conference dinner at Le Petit Prince de Paris, 12 Rue de Lanneau, 75005 Paris	

Saturday, June 15

	Room #1: amphithéâtre Bilsky-Pasquier	Room #2: amphithéâtre Gustave Roussy
	Session 3.7A: Mathematics, inferences, and accessibility (chair Étienne Ligout)	**Session 3.7B: The epistemology of extended agents** (chair: Pedro Luis Caetano Filho)
09:00 -09:40	**David Waszek** - « From scientific representations and applied mathematics to mathematical notations: Studying epistemic accessibility »	**Ramon Alvarado** - « Deflationary Empiricism or Radical Externalism: The epistemology of computational methods in Margaret Morrison's and Paul Humphreys' Work »
09:40 -10:20	**Nico Formánek** — « Epicycles revisited »	**Nick Wiggershaus** — « Why we should think of computational implementation as a three-place relation »
10:20 - 11:00	**Alison Springle, Elay Shech** — « Scientific Representations as Tools of Practical Access »	**Charles Rathkopf** – « Extending ourselves with generative AI »
11:00 - 11: 20	break	break
11:20 - 12:20	**Plenary conference**: Roman Frigg: **"Modelling, Representation, and Scientific Understanding »** (chair: Vincent Ardourel)	