

Marion VORMS

PERSONAL DETAILS

Born 3 December 1979

One child (born 2017)

TITLES

Alumna of the *École normale supérieure* (Paris)

Agrégée in Philosophy

PhD in Philosophy

CURRENT POSITION

Senior lecturer (*maître de conférences*) at University of Paris 1 Panthéon-Sorbonne, department of Philosophy

Permanent researcher at the *Institut d'Histoire et de Philosophie des Sciences et des Techniques* (UMR 8590)

AREAS OF SPECIALISATION AND COMPETENCE

AOS: philosophy of science, epistemology, psychology of reasoning

AOC: legal epistemology, philosophy of cognitive science, philosophy of biology, philosophy of physics

CAREER PATH

Since 2012	Maître de conférences (senior lecturer) at University Paris 1 Panthéon-Sorbonne
2015-2017	Marie-Sklodowska Curie fellow at Birkbeck College, London, Department of Psychological Sciences (while in leave from Paris 1)
2011-2012	Economic and Social Research Council (ESRC, UK) postdoctoral fellow at University College London , Cognitive, Perceptual, and Brain Sciences Department
2009-2011	ANR (Agence nationale de la recherche) postdoctoral fellow at IHPST (CNRS, Paris), CompuPhys project, "The Computational Turn in Physics"
2008-2009	ATER (teaching and research fellow) in Philosophy at University Paris 4 Paris-Sorbonne
2005-2008	<i>Allocataire monitrice normalienne</i> (AMN — graduate student instructor) at Paris 1
2003-2004	French tutor at Jawaharlal Nehru University, New Delhi
1999-2005	Fellow of the <i>École normale supérieure de la rue d'Ulm</i>

Other teaching positions

2010	Teaching fellow at <i>Conservatoire national des arts et métiers</i> (CNAM), occasional lectures
2009-2010	Teaching fellow at <i>Institut d'études politiques de Paris</i> (Sciences Po)
2009	Teaching fellow at <i>École des hautes études en sciences sociales</i> (EHESS), occasional lectures
2002-2003	Teaching assistant in Philosophy at University of Lille 3 Charles de Gaulle

EDUCATION

- 2005-2009 **PhD Thesis** “*Théories, modes d’emploi : une perspective cognitive sur l’activité théorique dans les sciences empiriques*” (“Theories, A User’s Guide: A cognitive approach to theorising in the empirical sciences”), (Paris 1 Panthéon-Sorbonne), under the supervision of J. Gayon and A. Barberousse. Members of the committee : P. Jacob (Institut Jean Nicod, CNRS), P. Humphreys (University of Charlottesville, Virginia), O. Darrigol (REHSEIS, CNRS). **With highest distinction. Winner of the Award “Chancellerie des Universités”.**
- 2004-2005 **DEA** (postgraduate degree) in History of Science, centre Alexandre Koyré, EHESS, Paris. Dissertation on “*Context and content in the Science Studies: a critical reading of Bruno Latour’s works*”, under the supervision of A. Dahan. **With highest distinction. Winner of the award Young researcher ‘science and society’,** Grenoble Alpes-Métropole — CNRS.
- 2002-2003 **DEA** (postgraduate degree) in Philosophy, University of Lille 3 Charles de Gaulle. Dissertation on “*Education and freedom in democracy in Simone Weil’s writings*”, under the supervision of F. Worms. **With highest distinction.**
- 2001-2002 *Agrégation* of philosophy (national competitive exam).
- 2000-2001 Philosophy master’s degree (*maîtrise*), University Paris 1.
- 1999-2000 Philosophy degree (Paris 10 Nanterre-University)
- 1999-2005 Student at the Ecole normale supérieure, Paris (admission after a national competitive exam)

AWARDS, GRANTS, FELLOWSHIPS, HONORARY POSITIONS

Awards

“**Prix jeune chercheur**” (Young researcher award) 2012 of the *Société de Philosophie des Sciences* for my article “Theorising and Representational Practices in Genetics”, *Biological Theory*, 2012

“**Prix de la Chancellerie des universités**” for my PhD dissertation

“**Prix Jeune Chercheur Sciences et Société**” (Young researcher science and society, first prize: gratification from Grenoble-Alpes-Métropole, CCSTI and Gresec — Stendhal University, in partnership with CNRS) for my postgraduate dissertation (DEA) in History of Science.

Individual research funding, grants and scholarships

Fondation pour les Sciences Sociales individual grant for writing an article on the topic of trust, 2018.

Marie Skłodowska-Curie intra-European individual fellowship for the project “Reasonable Doubt: An epistemological and psychological approach”, hosted by Birkbeck College, London, 2015-2017.

Leverhulme Trust Early Career Fellowship (3 years full time) for the project “The collective dimension of science”, to be hosted by Cambridge University, History and Philosophy of Science department (declined).

Research Foundation — Flanders (FWO) Post-doctoral fellowship (3 years full time renewable once) for the project “The epistemic and cognitive role of images in science”, to be hosted by the University of Antwerp (declined).

FNRS (Belgian *Fonds national de la recherche scientifique*) **research fellowship** (“*chargé de recherche*” appointment, 3 years full time renewable once) for a project on the collective dimension of science, to be hosted by University of Liège (declined).

Economic and Social Research Council (ESRC) postdoctoral fellowship for a project on “The cognitive basis of scientific reasoning, learning, and decision-making: the nature and role of representation”, hosted at UCL, 2011-2012.

PhD fellowship as an “*Allocataire Monitrice Normalienne*” at Paris 1 University, 2005-2008.

Grant from the *Comité national d’histoire et de philosophie des sciences* (French Academy of Sciences) for participation to the 13th international congress of history of science and technology, Budapest, Hungary, 2009.

Grant “Aires Culturelles” from Paris 1 University for research stay at New York University as a *visiting scholar*, sept-dec. 2007.

Grant from the *Comité national d’histoire et de philosophie des sciences* (French Academy of Sciences) for participation to the 13th congress of logic, methodology and philosophy of science, Beijing, China, 2007.

“**Lavoisier**” **Scholarship** for my stay in India, 2003-2004).

Honorary research positions, affiliations, and invitations

Isaac Newton Institute for Mathematical Sciences (Cambridge), “Probability and Statistics in Forensic Science” programme (invitation to short time stays and workshops participations, 2016)

Honorary research associate at UCL, Department of Cognitive, Perceptual, and Brain Sciences (2012-2017)

Affiliated research scholar at Cambridge University, Department of History and Philosophy of Science (2012-2015)

Visiting Scholar, New York University, Philosophy Department, on invitation by Professor Ned Block (sept.-dec. 2007).

EXPERTISE AND REFEREEING

Expert panels

Member of Luca Rivelli’s **thesis committee** (*Modularity, Antimodularity, and Explanation in Complex Systems*, supervisors: Philippe Huneman, IHPST, CNRS, University Paris 1, France & Fabio Grigenti, University of Padua), Padua, Italy, 2016

Member of the HCERES evaluation committee for the research unit “Activation de LYmphocyte T, surveillance du Stress et Auto-immunité”, Bordeaux, 2015

Academic member of the Economic and Social Research Council (ESRC) Peer Review College (2012-2016)

Member of several **interview committees for the recruitment of assistants professor** (*maîtres de conférences*), Paris 1 (2014 & 2015), Paris 4 (2015), external reviewer for the EHESS (2015).

Member of the committee for attribution of the “Young researcher award” (*Société de philosophie des sciences*)

Editorial board member and journal referee

Referee for several international journals: *Mind and Language, Biology and Philosophy, The Monist, Philosophy of Science, Philosophical Studies, Journal for General Philosophy of Science, Synthese, European Journal for Philosophy of Science, Erkenntis, Review of Philosophy and Psychology, Studies in History and Philosophy of Science, Philosophical Psychology, Science and Education, Perspectives on Science, Lato Sensu.*

Member of the advisory board of the Springer book series SAPERE.

RESEARCH RESPONSIBILITIES AND COLLECTIVES ACTIVITIES

Responsibilities

Co-leader of the team *Décision, rationalité et interaction* (DRI), with Mikaël Cozic, at the Institut d’Histoire et de Philosophie des Sciences et des Techniques (since 2017)

Member of the laboratory board (*conseil de laboratoire*) of IHPST, representing of assistant professors (since 2018)

Treasurer of the *Société de Philosophie des Sciences* (since 2018)

Member of the executive board (*conseil d’administration*) of the *Société de Philosophie des Sciences* (since 2014)

Representative of the philosophy department for international relations, Paris 1 (2013-2015)

PhD students representative at the philosophy doctoral school of University Paris 1 (2007-2009)

Conference and workshop organisation (as a main organiser)

Co-organiser (with Isabelle Drouet and Robin Lamarche-Perrin) of a workshop on the prediction of social phenomena, co-funded by the *Socété de Philosophie des Sciences*, SPS and the Association Française pour l’Intelligence Artificielle, AFIA (February 2019, forthcoming)

Main organiser of ReaDoubt international conference, “From Reasonable Doubt to Undue Scepticism”, co-organiser: Ulrike Hahn), Birkbeck College, London, UK (May 2017). Website: <http://readoubtproject.wixsite.com/conference>

Main organiser of CompuPhys international conference, “Knowing and Understanding with Computer Simulations”, co-organiser: Anouk Barberousse), Paris, France (June 2011)

Collective projects (leader or member)

Co-leader (with Etienne Vergès) of an interdisciplinary research group on judges' evidential reasoning (since 2016). Agreement with the *Ecole nationale de la magistrature* (ENM), involving research funding, in exchange of teaching sessions for training, and professional judges (2017-2019).

Member of MSH-Lorraine project Colexia, on collective dimension of science, leader: Cyrille Imbert (2011-2014).

Member of ANR Project CompuPhys, leader: Anouk Barberousse (2009-2011).

Participation to conferences organisation

Member of the programme committee for the *Société de Philosophie des Sciences* congress, Nantes, France, 4-6 July 2018

Member of the steering committee of the 'Science and Conspiracy' international conference & workshop University of Padua, Italy, 28-30 Nov. 2016

Member of the programme committee of *Models and Simulations 7* conference, Barcelona, Spain, 18-20 May 2016

Member of the scientific committee of the conference on "Uncertainty in Climate Science and its Impact on Decision-Making", Paris-Sorbonne, 26-28 May 2016

Member of the programme committee for the *Société de Philosophie des Sciences* congress, Lille, France, June 2014

Member of the programme committee for the *Models and Simulations 6* conference, Notre Dame, USA, May 2014

Member of the organisation committee for *Société de philosophie des sciences* congress, Geneva, 29-31 march 2007

Summer schools (organisation, participation as a student or as a teacher)

Invited teacher at the *Société de philosophie analytique* summer school in philosophy of science, St Jacut-de-la-Mer, France (Sept. 2014)

Member of the organisation committee for the CNRS summer school on Cognitive bases of scientific images, Roscoff, France (June 2006).

CNRS summer school "Images: Content, recognition, classification", Paris, France (July 2012).

CNRS summer school "Consciousness and action", Cargèse, France (June 2007).

Scholarly societies membership

Member of the *Société de Philosophie des Sciences* (SPS).

Member of the *Société de Philosophie Analytique* (SOPHA).

Member of the *Society for Philosophy of Science in Practice* (SPSP)

Member of *European Philosophy of Science Association*

PEDAGOGIC DUTIES

At University Paris 1

Representative of Philosophy department for the International relations in Paris 1 (selection of outgoing exchange students (Erasmus and other), support of incoming exchanges students, development of agreements with foreign universities, 2013-2015.

Responsible for the organisation of the philosophy of science, epistemology, and introduction to science courses for undergraduates in Paris 1 (course attribution, programme harmonization), 2012- 2015.

Supervision of 8 Master theses, 1st year

Supervision of 1 Master thesis, 2nd year

Jury in a Master 2 thesis defense: Hadrien Mamou, "An epistemological analysis of economic modeling: What do economists intend through modeling?", Supervisor: Mikaël Cozic, 2015

At University of Lyon 2, EMC - Laboratoire d'étude des mécanismes cognitifs

Supervision of a Master 1st year thesis in Cognitive psychology, 2015-2016

At Ecole normale supérieure

Tutor at the department of philosophy, and representative of the IHPST (2012-2015)

PUBLICATIONS

Monographs (in French)

Qu'est-ce qu'une théorie scientifique?, Vuibert "Philosophie des sciences", **2011**. Preface by Paul Humphreys.

Théories, modes d'emploi. Une perspective cognitive sur l'activité théorique dans les sciences empiriques, Hermann, in preparation (under contract).

Edited volumes

Co-editor (with Ulrike Hahn), "Reasonable Doubt: Theoretical and Practical Perspectives", special issue of *Synthese*, in preparation (proposal accepted).

Co-editor (with Chris Pincock), "Models and Simulations 4", special issue of *Synthese*, 190, 2 (**2013**): 187-337.

Articles in peer-reviewed journals

"Qu'est-ce qu'un doute raisonnable ?", *Revue philosophique de la France et de l'étranger*, 3, 143 (**2018**): 371-390.

"Is a unified account of conspiracy theories possible?" (with Philippe Huneman), *Argumenta*, 3, 2 (**2018**): 49-72.

"About the Empirical Warrants of Computer-Based Scientific Knowledge" (with Anouk Barberousse), *Synthese*, 191, 15 (**2014**): 3595-3620.

"The Birth of Classical Genetics as the Junction of Two Disciplines: Conceptual Change as Representational Change", *Studies in History and Philosophy of Science Part A*, 48, (**2014**): 105-116.

"Theorising and Representational Practices in Genetics", *Biological Theory*, 7,4 (**2013**): 311-324. **Awarded article** (*Young Resaercher award 2012, Société de Philosophie des Sciences*).

"Models of Data and Theoretical Hypotheses: A Case-Study in Mendelian Genetics", *Synthese*, 190, 2 (**2013**): 293-319.

"A-not-B Errors: Testing the Limits of Natural Pedagogy", *Review of Philosophy and Psychology*, 3,4 (**2012**): 525-545.

"Representing with Imaginary Models: Formats Matter", *Studies in History and Philosophy of Science Part 1*, 42, 2 (**2011**): 287-295.

"Le pendule, la licorne et la figure: comment les modèles scientifiques représentent les phénomènes", *Philonsorbonne*, 3 (**2009**): 75-95.

Peer-reviewed book chapters and proceedings papers

"Theories and models", in A. Barberousse, D. Bonnay, & M. Cozic (eds.), *The Philosophy of Science. A Companion*, Oxford University Press, **2018**: 171-224.

"Scientific Change" (with Anouk Barberousse), in A. Barberousse, D. Bonnay, & M. Cozic (eds.), *The Philosophy of Science. A Companion*. Oxford University Press, **2018**: 225-258.

"The dilution effect: Conversational basis and witness reliability" (with Jens Koed Madsen & Ulrike Hahn), in Gunzelmann, G., Howes, A., Tenbrink, T. & Davelaar, E. J. (eds.), *Proceedings of the 39th Annual Conference of the Cognitive Science Society*, Austin, TX: Cognitive Science Society, 2663-2668, **2017**.

"Engagement théorique et présentation des données : les cartes génétiques", in D. Andler (ed.), *Sciences et décision*, Presses Universitaires de Franche-Franche-Comté, **2015**: 109-118.

“Computer simulations and empirical data” (with Anouk Barberousse), in J. M. Durán & E. Arnold (eds.), *Computer simulations and the changing face of scientific experimentation*. Cambridge Scholars publishing, **2013**: 29-45.

“Formats of Representation in Scientific Theorising”, in P. Humphreys & C. Imbert (eds.), *Models, Simulations, and Representations*, Routledge, **2012**: 250-273.

“The Theoretician’s Gambits: Scientific Representations, Their Formats and Content”, in L. Magnani, W. Carnielli, & C. Pizzi (eds.), *Model-Based Reasoning in Science and Technology. Abduction, Logic, Computational Discovery*, Springer, Berlin/Heidelberg, **2010**: 533-558.

Other book chapters

“Le rôle d’autrui dans la formation des connaissances”. Introduction to the French translation of Coady (1973) and Burge (1993) in D. Bonnay & H. Galinon (eds.), *Épistémologie sociale, textes clés*, Vrin (forthcoming).

“Comment parler de la science ?”, in M. Silberstein (ed.), *Qu’est-ce que la science... pour vous ?* (tome 2), Éditions Matériologiques, **2018**: 325-330.

“Le rôle des diagrammes et des schémas dans l’activité théorique en biologie”, in T. Hoquet & F. Merlin (eds.), *Précis de philosophie de la biologie*, Vuibert, **2014**: 125-143.

“Qu’est-ce qu’une théorie scientifique ?”, in T. Lepeltier (ed.), *Histoire et Philosophie des sciences*, Sciences Humaines Publ., **2013**: 170-180.

“Le changement scientifique” (with Anouk Barberousse), in A. Barberousse, D. Bonnay, & M. Cozic (eds.), *Précis de philosophie des sciences*, Vuibert “Philosophie des sciences”, **2011**: 171-205.

Other articles

“La valeur probante du témoignage: perspectives épistémologique et juridique”, *Cahiers philosophiques*, 142, 3 (**2015**): 21-52.

“What do Genetic Maps Represent?”, in S. Brauckmann, C. Brandt, D. Thieffry & G. B. Müller (eds.), *Graphing Genes, Cells, and Embryos. Cultures of Seeing 3D and Beyond*, MPI Preprint 380, **2009**.

“À l’épreuve du monde. L’éducation au sens large”, *Les Études Philosophiques*, 3 (**2007**), “Simone Weil et la Philosophie”: 155-168.

Translations (from English into French)

Burge, T. “Content preservation”, in D. Bonnay & H. Galinon (eds.), *Épistémologie sociale, textes clés*, Vrin (forthcoming).

Coady, C.A.J. “Testimony and observation”, in D. Bonnay & H. Galinon (eds.), *Épistémologie sociale, textes clés*, Vrin (forthcoming).

Chang, H., “Complementary chemistry”, in J.P. Llored (ed.), *La chimie, cette inconnue ?*, Hermann (forthcoming).

Books and conferences reviews

Review of R. Frigg & M. C. Hunter (eds.), *Beyond Mimesis and Convention: Representation in art and science*, Dordrecht: Springer, 2010. *Theoria*, 75: 391-394, **2012**.

Report on the conference *Models and Simulations 2* (with Julian Reiss), *The Reasoner*, vol. 1, n°7, nov. **2007**.

“L’actualité de Simone Weil”, review of the last publications on Simone Weil, *Les Études Philosophiques*, **2007**, 3 (“Simone Weil et la Philosophie”), pp. 243-256.

Articles under review or nearing submission

“In the space of reasonable doubt” (with Ulrike Hahn), submitted to *Synthese* (under review).

“The role of plausibility in acceptance of novel propositions: A challenge to Gilbert’s ‘Spinozan’ theory of belief formation” (co-authored with Adam Harris and Ulrike Hahn). **Preregistered study (OSF “preregistered challenge”)**,

under the project title “Gilbert and plausibility”. **This project was awarded a grant from the *Fondation pour les sciences sociales*.**

“Dilution and concentration: Epistemic expectations may influence perceived strength of individual pieces of information” (co-authored with Jens Koed Madsen and Ulrike Hahn), nearing submission to the *Journal of Experimental Social Psychology*.

“The story-model of jurors’ reasoning: a theory of evidential reasoning?” (co-authored with David Lagnado), in preparation for submission to *Artificial Intelligence and Law*.

“Coherence and credibility in the story-model of jurors’ decision-making: does mental simulation really drive the evaluation of the evidence?”, in preparation for publication in A. Nepomuceno, L. Magnani, F. Salguero, C. Barés, M. Fontaine (eds.), *Model-Based Reasoning in Science and Technology. Inferential Models for Logic, Language, Cognition and Computation*, Series “Sapere”, Springer.

“Doute raisonnable et intime conviction — normes juridiques, normes épistémiques”, in preparation for publication in a special issue of *Droit et Philosophie* (proposal accepted).

“Epistemic and ethical dimensions of Reasonable Doubt as a threshold: A comparison of legal and scientific practice” (with Philippe Huneman), in preparation for submission to a special issue of *Synthese*.

Introduction to the special issue of *Synthese* on Reasonable Doubt (with Ulrike Hahn), proposal accepted.

TALKS

International conferences and workshops (contributed presentations)

2018 “The role of plausibility in acceptance of novel propositions: a challenge to Gilbert’s ‘Spinozan’ theory of belief formation”, poster presentation (joint work with Ulrike Hahn and Adam Harris), *International Convention of Psychological Sciences (ICPS)*, Paris, 7-9 March (poster submission accepted).

“Coherence and credibility in the story-model of jurors’s decision-making: Does mental simulation really drive the evaluation of evidence?”, *Model-Based Reasoning in Science and Technology*, Sevilla, 24-26 October.

“Justice prédictive et raisonnement des juges” (with Isabelle Drouet & Anouk Barberousse), *Société de Philosophie des Sciences* congress, Nantes, 4-6 July.

2017 “The dilution effect: Conversational basis and witness reliability”, poster presentation (joint work with Jens Koed Madsen and Ulrike Hahn, presentation made by J. Koed Madsen, as I was in maternity leave), *Annual Meeting of the Cognitive Science Society*, London, 26-29 July.

“The story-model of jurors’ decision-making: A theory of evidential reasoning?”, *Evidence & Decision Making in the Law: Theoretical, Computational and Empirical Approaches* workshop, *International Conference on AI and Law (ICAIL)*, London, 16th June.

2016 “An overview of the different disciplinary approaches to conspiracy theories”, ‘Science and Conspiracy’ conference, University of Padua, Italy, Nov. 28-30.

“The story-model of jurors’ reasoning and forensic evidence”, joint conference of the European Association for Science and Technology Studies (EASST) and the Society for Social Studies of Science (4S), symposium on ‘Weakening and strengthening forensic science in Europe’ (convenor: David Teira), Barcelona, Spain, 31 Aug.-3 Sept.

“The credibility of scientific evidence”, with Anouk Barberousse and Isabelle Drouet, joint conference of the European Association for Science and Technology Studies (EASST) and the Society for Social Studies of Science (4S), symposium on ‘Weakening and strengthening forensic science in Europe’ (convenor: David Teira), Barcelona, Spain, 31 Aug.-3 Sept.

2015 “Theories and their versions”, 2nd Biennial Meeting of the Philosophy of Science Group in India, Tata Institute of Social Sciences, Mumbai, India, 19-21 Dec.

“Reasons to Doubt Testimony: What are the Components of Testimonial Credibility?”, with Anouk Barberousse, Workshop ‘Pragmatics and Testimony’, University of Trieste, Italy, 5-6 Nov.

2014 “Spatial representations in science: Towards a typology”, *Philosophy of Science Association (PSA)* conference, Chicago, USA 6-9 Nov.

- 2013 “The role of models in mind and science » (with David Lagnado), *European Philosophy of Science Association* conference, Helsinki, Finland, 28-31 Aug.
 “Theorizing and representational practices in genetics”, congress of the *International Society for History, Philosophy and Social Studies of Biology* (ISHPSSB), Montpellier, France, 7-12 July.
 “Two types of spatial representations in science: diagrams and schematic representations”, colloque de la *Society for Philosophy of Science in Practice*, Symposium “Scientific representations across history and practice”, Toronto, Canada, 26-29 June.
- 2012 “The role of models in mind and science” (with David Lagnado), International Conference on Thinking, Birkbeck/UCL, London, UK, 4-6 July.
 “The role of models in mind and science” (with David Lagnado), conference *Model-Based Reasoning in Science and Technology*, Sestri Levante, Italy, 21-23 June.
 “Ernest Nagel’s conception of models: When agents get into the picture of theories”, *Models and Simulations 5*, Helsinki, Finland, 14-16 June.
 “La notion de modèle chez Ernest Nagel: les théories scientifiques sont toujours déjà interprétées”, congress of the Société de philosophie analytique (SOPHA), Paris, France, 4-6 May.
- 2011 “How are Scientific Theories to Be Analysed? Representational and Computational Aspects” (with Anouk Barberousse), 7th congress of *European Society for Analytic Philosophy*, Milano, Italy, 1-6 Sept.
 “The Versions of Classical Mechanics: An Agent-Centred View on the Content of Theories”, *Philosophy of science colloquium*, University of Johannesburg, Durban, South Africa, 18th Jan.
- 2010 “The Versions of Classical Mechanics: An Agent-Centered View on the Content of Theories”, 9^e conference of the SIFA, Padova, Italy, 23-25 Sept.
 “Natural Pedagogy and A-not-B tasks”, *Levels of Processing: Foundations of Social Cognition*, University Club Bonn, Germany, 16-18 Sept.
- 2010 “Models of Data and Theoretical Hypotheses: A Case Study in Classical Genetics”, conference *Models and Simulations 4*, Toronto, Canada, 7-9 May (participation accepted).
- 2009 “Formats of Representation in Scientific Theorising”, conference *Model-Based Reasoning in Science and Technology*, Campinas, Brazil, 17-19 Dec.
 “Quelle forme donner aux cartes génétiques? Présentation des données et hypothèses théoriques” (symposium “Nouveaux regards sur le choix théorique”), *Société de philosophie des sciences* congress, Paris, 12-14 Nov.
 “What are Genetic Maps Visualisations of?” (symposium “Visual Cognition in the History of Science”), 13th international congress in history of science and technology, Budapest, Hungary, 28 July-2 Aug. (financial support by CNFHPS, French Academy of Sciences).
 “Formats of Representation in Scientific Theorising”, conference *Models and Simulations 3*, Charlottesville, Virginia, USA, 5-7 March.
- 2008 “Conceptual Role Semantics and Theory Understanding: the Case of Classical Mechanics”, 6th congress of the *European Society for Analytic Philosophy*, Krakow, Poland, 21-28 Aug.
 “Scientific Theorising Through Genetic Mapping”, annual congress of the *British Society for Philosophy of Science*, Saint-Andrews, UK, 10-11 July.
 “Models and Formats of Representation”, *Central European University Philosophy graduate conference*, Budapest, Hungary, 30-31 March.
- 2007 “Understanding Theories: Formats Matter”, congress of the *European Philosophy of Science Association*, Madrid, Spain, 13-17 Nov.
 “Models and Formats: Representational and Computational Aspects”, conference *Models and Simulations 2*, Tilburg, Netherlands, 11-13 Oct.
 “Understanding Theories in Practice”, conference of the *Society for Philosophy of Science in Practice*, Twente, Netherlands, 22-24 Aug.
 “Understanding Theories” 13th international congress of logic, methodology, and philosophy of science, Tsinghua University, Beijing, China, 13-18 Aug. (financial support by CNFHPS, French Academy of Sciences).

"Models and Formats of Representation", annual congress of the *British Society for Philosophy of Science*, Bristol, UK, 5-6 July.

"Paradigmes et systèmes symboliques: les diagrammes en génétique mendélienne", 2nd congress of the Société de philosophie des sciences, Genève, Switzerland, 29-31 March.

2006 "La compréhension des théories", congress of the Société de philosophie analytique (SOPHA), Aix-en-Provence, France, 1st-3 Sept.

Invited talks (conferences, workshops and seminars)

2019 "Epistemic and ethical dimensions of Reasonable Doubt as a threshold: A comparison of legal and scientific practice", colloquium *Philosophie und Wissenschaftsreflexion*, Hannover, 29 January (forthcoming).

2018 "Epistemic and ethical dimensions of Reasonable Doubt: standards of proof and acceptability in judicial and scientific practice"(with Philippe Huneman), workshop *Scientific Findings and Democratic Ideals* (organisers: P. Kitcher & B. Reber), Columbia University, New York City, 6-7 December (forthcoming).

"An empirical inquiry into the role of plausibility in the formation of belief", Philosophy Departmental Research Seminar, University of East Anglia, Norwich, 22nd November (forthcoming).

2017 "On Reasonable Doubt", HPS departmental seminar, Cambridge, UK, 16th Feb.

"On Reasonable Doubt", 'Epistemic Angst' conference (around Duncan Pritchard's book), University of Paris 4-Sorbonne, Paris, France, 19-20 Jan.

2016 "Theorising and representational practices in Classical genetics", workshop on 'Representing scientific results: Forms of knowledge', University of Kassel, Germany, 18-19 Nov.

"Reasonable Doubt: Epistemological Reflections on Jurors' Decision-making", Center for Philosophy of Science Annual Lecture Series, University of Pittsburgh, USA, 22 April.

"On Reasonable Doubt", London Judgement and Decision-Making (LJDM) seminar, London, UK, 16th March.

2015 "Les théories physiques : contenu et formulations", Physics and Chemistry departmental seminar, Centre de Recherche Paul Pascal, Bordeaux, 4 June.

2014 "Theories and their versions", Durham Philosophy Seminar Series, Durham, UK 6 Feb.

"Les formats de représentation en science", PHITECO seminar, Université Technologique de Compiègne, France, 31 Jan.

"Modes de représentation en biologie", *Philosophy of Biology* workshop (organisers: F. Merlin & T. Hoquet), Lyon, 30-31 January.

2013 "Theories and their versions: logical equivalence, inferential differences", 5th Madrid Workshop on New Trends in the Philosophy of Science, *Inferentialism in epistemology and philosophy of science*, Madrid, Spain, 11-13 Nov.

"Theorising and representational practices in genetics", Conference "Mathematising Science: Limits and Perspectives", University of East Anglia, Norwich, UK, 16-17 May.

"Les théories scientifiques : défense d'une approche cognitive" , *Les jeudis de l'histoire et de la philosophie des sciences*, École Normale Supérieure, Paris, 14 March.

2012 Comments on Thomas Pradeu, "Une théorie du développement est-elle possible?", workshop on theories in developmental biology, IHPST, Paris, France, 8 October.

2012 "Théories, modèles, représentations scientifiques", Les lundis de la philosophie, École Normale Supérieure, Paris, 5 March.

2011 "Theorising and representational practices in classical genetics", workshop *The meaning of "Theory" in Biology*, Konrad Lorenz Institute, Altenberg, Austria, 1-3 July.

"Collaborative computer simulations in climate science" (with A. Barberousse and H. Galinon), workshop "Comment poursuivre collectivement des buts épistémiques?", Archives Poincaré, Nancy, 8 April.

"Collaborative computer simulations in climate science" (with A. Barberousse and H. Galinon), workshop "Social epistemology and cognitive sociology", Université de Provence, 24 March.

- “Genetic Mapping as the Merging of Two Disciplines’ Representational Practices (1913-1934)”, workshop *Interdisciplinary Exchanges as the Object of Philosophical Inquiry*, Helsinki, Finland, 3-4 March.
- 2010 “Entre avancée formelle et changement conceptuel: la contribution de Lagrange à la mécanique analytique vue par les savants philosophes du XIX^e siècle”, seminar “De l’usage de l’histoire dans les sciences physiques”, REHSEIS, CNRS, 26 Oct.
- “Formats of Representation in Science”, *Phil/Sci workshop*, University of Vienna, Austria, 14 Oct.
- “A Cognitive Approach to Theorising in the Empirical Sciences”, Konrad Lorenz Institute, Altenberg, Austria, 8 July.
- “L’invention de la mécanique analytique: changements conceptuels au sein d’une même théorie”, seminar “Paradigmes de l’invention”, Institut de recherches philosophiques, University Paris 10, 16 Feb.
- “La variété des modes de représentation dans la pratique scientifique”, seminar SIPS, University of Franche-Comté, Besançon, 6 Jan.
- 2008 “What do Genetic Maps Represent?”, Workshop “Biographs II”, *Max Planck Institute for the History of Science*, Berlin, Germany, 14-15 June.
- “Templates, Exemplars, and Formats”, workshop on models, IHPST (organiser: Paul Humphreys), 9-13 June.
- 2007 “Models and Formats of Representation”, workshop *Models as evidence: the role of idealisation and fictions in science*, UNED-Complutense, Madrid, Spain, 29 June.
- 2006 “L’explication en sciences”, seminar on scientific popularisation, Department of Cognitive Studies, École normale supérieure (organiser: Richard-Emmanuel Eastes), 7 June.
- 2005 “Regards philosophiques sur les *Science Studies*”, doctoral workshop of centre Alexandre Koyré, 12 April.

Roundtables, knowledge dissemination and research valorisation

- 2018 *Assises de la recherche*, University Paris 1, co-organisation (with Philippe Huneman) of a roundtable on disagreement in science and law, 11 Dec.
- Invited conference on Reasonable Doubt and Epistemic Responsibility at the *Nuit de la philosophie*, UNESCO, Paris, 16 Nov.
- 2017 Invited participation to a roundtable on Scientific Revolutions, *Nuit des Révolutions (Nuit de la Science)*, École normale supérieure, Paris, 26 Jan.
- 2016 “Raisonnement et prise de décision : quels problèmes pose la multidisciplinarité ?”, lecture in the framework of a training in translational approach in cancer research for medical, biological, and pharmaceutical students, Dijon, France, 15 June.
- 2015 Radio interview on “Les Nouveaux chemins de la connaissance”, 15 June.
- Invited conference at Night of Philosophy, cultural services of the French Embassy, New York, USA, 24 April.
- 2012 Radio interview on “Continent sciences”, France Culture (diffusion 5 March).
- 2009 “La notion de visualisation en sciences: quel est le contenu des images scientifiques ?”, seminar “Textes Images”, Espace Mendès-France, Centre de culture scientifique, technique et industrielle de Poitiers, 19 Nov.
- “La notion d’observation en sciences”, 6th science departmental forum of the Alpes de Haute-Provence, Forcalquier, 15 May.
- 2008 “Buts et moteurs du progrès scientifique”, 6th regional forum of scientific and technological culture, “Sciences et citoyenneté”, Marseille, Hôtel de Région, 20 Nov.