# Soazig Le Bihan

### Curriculum Vitae October 2018

Philosophy Department LA 101 soazig.lebihan A T umontana.edu University of Montana 406-243-6233 (Office) 32 Campus Drive 843-422-6651 (Cell) Missoula, MT 59812-5780 www.soaziglebihan.org

AOS: Philosophy of Science, Philosophy of Physics, Philosophy of Ecology, Science and Values

AOC: History of Modern Philosophy, Philosophy of Law

### Education

Ph.D. in Philosophy. University of Nancy (France) and Bielefeld (Germany). 2008.

Thesis Understanding Quantum Phenomena.

Committee Prof. Guido Bacciagaluppi (Aberdeen), Prof. Harvey Brown (Oxford), Prof. Michel Bitbol (Sorbonne), Prof. Martin Carrier (Bielefeld), Prof. Michael Detlefsen (Notre-Dame), Prof. Gerhard Heinzmann (Nancy).

Bachelor of Science in Fundamental Physics. University of Paris VI Jussieu. 2004.

**D.E.A.** in Philosophy. University of Paris IV – Sorbonne (equivalent A.B.D.). 2001.

**Agrégation** in Philosophy. 2000.

Maîtrise in Philosophy, University of Paris X - Nanterre. 1999.

Bachelor of Arts in Philosophy. University of Paris I – Sorbonne. 1998.

## Appointments

2018-present	Full Professor. University of Montana
2008-present	Director of the Prelaw Program. University of Montana.
2012-2018	Associate Professor. Department of Philosophy. University of Montana.
2013	Tenure. University of Montana.
2011-Fall	Visiting Fellow. Center for Philosophy of Science. Pittsburgh.
2008-2012	Assistant Professor. Department of Philosophy. University of Montana.
2006-2008	Sawyier Fellow. Humanities Department. Illinois Institute of Technology.
2005-2006	Graduate Fellow. University of Bielefeld.
2002-2005	Allocation Couplée. University of Nancy, University of Jussieu.
2001-2002	Graduate Fellow. Department of Philosophy. Princeton University.
1997-2001	École Normale Supérieure.

## **Scholarship Publications**

Le Bihan, Soazig (under review), "Felicitous Falsehoods: Factivity vs Epistemic Access", Synthese, Invited paper for a special issue on Kate Elgin's True Enough.

Le Bihan, Soazig and Iheany Amadi (2017). "On Epistemically Detrimental Dissent: Contingent Enabling Factors v. Stable Difference Makers". Philosophy of Science, 85:4.

Le Bihan, S. (2017), "Enlightening Falsehoods: a Modal View of Scientific Understanding". in *Explaining Understanding: New Perspectives from Epistemology and Philosophy of Science*, ed. by Grimm, S., Baumberger C., and Sabine Ammon, Routledge. pp.111-35.

Le Bihan, S. (2014), "How Understanding Matters – Or not". in *Probing the Meaning of Quantum Mechanics: Physical, Philosophical, Mathematical, and Logical Perspectives*, ed. by C. de Ronde, S. Aerts, D. Aerts, World Scientific. pp. 127-42

Le Bihan, S. (ed.) (2013a), Précis de Philosophie de la Physique, Vuibert.

Le Bihan, S. (2013b), "Le problème de la localité en mécanique quantique", in *Précis de Philosophie de la Physique*, Vuibert, pp. 26-52.

Le Bihan, S. (2013c), "Qu'est-ce que la philosophie de la physique", in *Précis de Philosophie de la Physique*, Vuibert, pp.1-25.

Le Bihan, S. (2012), "Defending the Semantic View: What it Takes.", European Journal for the Philosophy of Science, 2, 3, pp. 249-74.

Le Bihan, S. (2009a), "Des mondes et des particules, Comment on Jean Bricmont", in Philosophie de la physique quantique, Vuibert.

Le Bihan, S. (2009b), "Fine Ways to Fail to Secure Local Realism", Studies in History and Philosophy of Modern Physics, 40, 2, pp. 142-50.

Le Bihan, S. (2008a), "Book Review. L.G. Johansson. Interpreting Quantum Mechanics", International Studies in Philosophy of Science, 22, 3, pp. 330-33.

Le Bihan, S. (2008b), "La conception sémantique des théories scientifiques, En quoi a-t-elle pu rester 'sémantique'?", Matière Première, 3, pp. 35-57.

Le Bihan, S. (2008c), Understanding Quantum Phenomena, PhD thesis, Bielefeld University / University of Nancy, Bielefeld, Nancy.

Le Bihan, S. (2007), "What Status Should be Given to the Quantum Description of the World?", in Rethinking the Comparative Evaluation of Scientific Theories, Stabilities, Ruptures, Incommensurabilities, ed. by L. Soler, H. Sankey, and P. Hoyningen-Huene, vol. 255, Boston Studies in the Philosophy of Science, Springer.

Le Bihan, S. (2006), "La conception sémantique des théories scientifiques, En quoi a-t-elle pu se dire 'sémantique?", Matière Première, 1, pp. 215-250.

## Works in Preparation

Modal Understanding (book).

Theoretical Understanding in Ecology: the Modal View.

No Quantum Threat to Special Relativity.

French Translation of *The Scientific Image*, by Bas van Fraassen, with Guillaume Garetta.

### **Invited Talks**

April 2017. Unification, Explanation, and Understanding, Disentangled. Philosophy Forum. University of Montana

March 2017. What Philosophers of Science Learned from Ecology, and What Ecologists Can Learn in Return. Wildlife Graduate Seminar. University of Montana.

January 2017. Understanding Quantum Foundations. Invited Talk. Workshop "Models, Explanations, and Realism about Quantum Physics". University of Leeds.

June 2016. Invited Commentator. Varieties of Understanding Capstone Conference. Ford-ham University.

March 2016. (with Iheanyi Amadi). On Epistemically Detrimental Dissent: Contingent Enabling Factors v. Stable Difference Makers. Philosophy Forum, University of Montana.

January 2016. La science ou l'exploration des possibles. Jeudis de l'Histoire et Philosophie des Sciences. École Normale Supérieure, Paris.

January 2016. Qu'est-ce que la compréhension scientifique?. Invited Research Seminar. 4 sessions. LabeX Transfers. École Normale Supérieure, Paris.

June 2015 Commentators-at-large Panel, Varieties of Understanding Mid-Point Conference, Fordham University.

November 2014. Scientific understanding without realism, Philosophy Forum, University of Montana.

April 2013. La philosophie de la physique aujourd'hui. University of Lyon.

April 2013. Les relations causales sous-jacentes aux corrélations de Bell. University of Lyon.

April 2013. La compréhension scientifique par delà la vérité. Paris IV Sorbonne.

April 2013. La philosophie de la physique aujourd'hui. University of Lille.

March 2013. La philosophie de la physique aujourd'hui. Institut de Physique, University of Rennes.

March 2013. La philosophie de la physique aujourd'hui. Archives Poincaré, University of Nancy.

March 2013. La philosophie de la physique aujourd'hui. IHPST, Paris.

March 2013. Les relations causales sous-jacentes aux corrélations de Bell. Ecole Normale Supérieure, Paris.

October 2011. Enlightening falsehoods. Center for Philosophy of Science, University of Pittsburgh.

May 2011. Why understanding matters – or not. IHPST, Paris.

April 2010. Bell-type correlations: the hidden causal picture re-assessed. Philosophy Forum. University of Montana.

Jan. 2010. Bell-type correlations: the hidden causal picture re-assessed. Ecole Normale Supérieure, Paris.

May 2008. Defending the semantic view: what it takes. Entanglement and Complexity Conference, University of Nice-Sophia Antipolis.

Feb. 2008. Bell-type correlations: the hidden causal picture re-assessed. Center for Philosophy of Science, University of Pittsburgh.

Jan. 2008. Defending the semantic view: what it takes. Philosophy Colloquium. University of South Carolina.

May 2007. Worlds and particles. Comment on Jean Bricmont for the Pierre Duhem Conference. Ecole Normale Suprieure, Paris.

Mars 2007. Logical models vs. scientific models: a false dilemma for the semantic view. Philosophy Forum, University of Missoula.

Mars 2007. Philosophical Interpretations of quantum mechanics. Alliance Française, University of Missoula.

December 2006. A Fine lecture. Humanities Department Colloquium, I.I.T.

Mai 2006 Sur l'interprétation du théorème de Bell par Fine. Graduate Conference IHPST, Paris.

April 2006. Sur quelques mythes concernant la conception sémantique des modèles scientifiques. Centre Cavailles, Ecole Normale Supérieure, Paris.

January 2006. The interpretations of quantum mechanics: the current state of play. Physics Seminar, University of Bielefeld.

Nov 2005. Statistical independence in Bell's theorem: locality or rationality. Neuere Themen der Wissenschaftsphilosophie Seminar, University of Bielefeld.

Oct 2005. Statistical independence in Bell's theorem: locality or rationality. Young Quantum Meetings, CREA, Brussels.

August 2005. Statistical independence: locality or rationality. Summer School Philosophy, Probability and Physics, Konstanz.

June 2005. L'indépendance statistique entre localité et rationalité. Graduate Conference, Paris VII.

March 2005. Statistical Independence: Locality or Rationality. Work in Progress graduate seminar, University of Pittsburgh.

March 2005. Les interprétations de la mécanique quantique. University of Nancy.

Dec. 2004. Statistical independence: locality or rationality? Conference: Philosophy, Physics and Probability, Paris.

March 2003. Saving incommensurability: semantic theory of meaning or semantic theory of science? Comment on Martin Carrier. Archives Poincaré, University of Nancy.

### Conference Presentations

November 2016. (with Iheanyi Amadi) On Epistemically Detrimental Dissent: Contingent Enabling Factors v. Stable Difference Makers. Co-presentation with Iheanyi Amadi. Philosophy of Science Association, Atlanta.

November 2014. Scientific understanding: a modal view. Co-presentation with Armond Duwell. Philosophy of Science Association Conference, Chicago.

June 2013. Enlightening falsehoods: scientific understanding beyond truth. Symposium on "Understanding and Realism". Society for the Philosophy of Science in Practice Conference, Toronto.

Nov. 2008. Defending the semantic view: what it takes. Philosophy of Science Association Conference, Pittsburgh.

June 2006. In defense of the semantic conception of scientific models. HOPOS, Paris.

April 2006. Logical or scientific models: a false dilemma for the semantic view. 33rd Annual Dubrovnik Philosophy of Science Conference.

Jan. 2005. Que reste-t-il des lois de nature dans la conception sémantique des théories scientifiques?. Communication in the Symposium "What is the future for laws of nature?" for the First Congress of the Société de Philosophie des Sciences, Paris.

Sept. 2004. Experimental metaphysics from a certain perspective. 13th Meeting on the Foundations of Physics, York.

June 2004. What status should be given to the quantum description of the world? Answer to the communication by A. Zwirn, International Conference Rethinking the Comparative Evaluation of Scientific Theories, Nancy.

Nov. 2003. (with Anouk Barberousse) From physics to ontology? Answer to the communication Explanation, Emergence and Quantum-entanglement by A. Hütteman. Reduction and Emergence International Conference, Ecole Normale Supérieure, Paris.

Sept 2003. About non-locality: experience, theory, interpretation and the levels of legitimacy of scientific discourses. SOPHA, Montreal.

August 2003. Epistemological morals of a twenty year long meaningless discussion about non-locality. International Congress of Logic, Methodology and Philosophy of Science, Oviedo.

April 2003. Non-locality: a twenty year long meaningless discussion. International Congress of Philosophy of Science, Dubrovnik.

## Awards, Scholarships and Grants

2017. Outstanding Faculty Advising Award.

2016. Merit Increase. University of Montana.

January 2016. Invited Professor, LabeX TransferS, Équippe république des savoirs, École normale supérieure, Paris.

2014. Merit Increase. University of Montana.

2013. International Activity Grant. University of Montana.

2012. Student Affairs Faculty Award. University of Montana.

Fall 2011. Visiting Fellow: Center for Philosophy of Science, University of Pittsburgh

Fall 2011. Faculty Professional Enhancement Grant. University of Montana.

2011. Merit Increase. University of Montana.

2006-2008. Sawyier Predoctoral Fellowship. Illinois Institute of Technology.

Spring 2005. DAAD Fellowship.

Fall 2005. Fellowship Université Franco-Allemande.

2004-2005. Graduate Fellowship. Bielefeld University.

2004. Huguette Delavault Fellowship. Association des Femmes Françaises Diplomées de l'Université.

2004. Conference Expenses Graduate Fellowship. 13th UK Meeting on the Foundations of Physics, York.

2003. Travel Grant. Comité National de Philosophie et d'Histoire des Sciences, LMPS Congress, Oviedo.

2002-2005. Mobility Graduate Fellowship "co-tutelle de thèse". European Union.

2001-2002. Jane Eliza Procter Visiting Fellowship. Princeton University.

### Public Outreach

#### **Public Lectures:**

- 2017. Speaker. Davidson's Honors College Ways of Knowing Plenary Lecture. "Science, Truth, Values, and Democracy".
- 2017. Moderator. Veritas Forum. "Can there be a separation of Church and State? Politics and Religion."
- 2016. Panelist. Veritas Forum. "Does science point to atheism?"
- 2013. Keynote Address, Phi Kappa Phi annual banquet and induction ceremony. "Education and the Good Life."

#### Media:

- Panelist, Nature League, Nature + Philosophy, Philosophy of Ecology, Spring 2018.
- Regular Public Philosophy radio talk shows on KGVO Talk Back, since 2016.

Blog: Sciences Visions (PSA Women's Caucus online publication)

- "On Marathons, Cross Fit, and the Academic Life", August 2017.
- "A second best for inclusive teaching." May 2016.
- "The Dawn", Dec. 2016.
- "Impostors unite!" October 2015.
- "On what it means for us to make the world a better place". April 2014.

Engaged Philosophy – Component of my Intro to Ethics class

Interview: http://www.engagedphilosophy.com/2016/09/05/soazig-le-bihan/

#### In the News

- "Don't Cut University of Montana Students Short", Missoulian, April 2018.
- "University of Montana Faculty: Spinal Cord Injury Research has Track Record of failure", *Missoulian*, Feb. 2017.
- "UM advised to forgo pig research lab", Missoulian, Jan. 2017.

Le Bihan, S. (2005), Entries in the Cultural Dictionary of French Language, Le Robert : "Invention"; "Impression"; "Steam"; "Science"; "Sea".

## **Teaching Competence**

Graduate level Philosophy of Science; Philosophy of Physics; Foundations

of Ecology; Science and Values.

Advanced undergraduate Modern Philosophy; Philosophy of Law.

**Introductory** Intro to Philosophy; Critical Thinking; Ethics; History and

Philosophy of Science; Ancient Philosophy.

Other LSAT preparation.

## Graduate Advising

• Expected 2020. Committee Chair: Anne Beldina, Masters in Environmental Philosophy. Topic to be determined.

- 2017-18. Committee Chair: Rebecca Korf, Masters in Environmental Philosophy. Respecting Public Investment: The Problems with Democratic Endorsement as a Criterion for Legitimate Value in Science, May 2018.
- 2015-17. Committee Chair: Iheanyi Amadi, Masters in Environmental Philosophy. Epistemically Detrimental Dissent in Climate Science. May 2017.
- 2011-12. Committee Member: Casie Dunleavy, Masters in Environmental Philosophy. The Companionship Model and Our Aging Animals: A Moral Framework.

# Teaching Activities at the University of Montana

Fall 2018. Independent Study – Philosophy of Law: Hate Speech – Alex Butler.

Fall 2018. Senior Honors Thesis Faculty Mentor – Jury Instructions Regarding the Limits Eye-Witness Identification – Kendra Sorensen.

Fall 2018. Internship Supervision

Spring 2018. Chair of Thesis Committee. Respecting Public Investment: The Problems with Democratic Endorsement as a Criterion for Legitimate Value in Science. Rebecca Korf.

Spring 2018. Internship Supervision.

Fall 2017. Internship Supervision.

Spring 2017. Independent Study. Philosophy of Science. Rebecca Korf and Ryan Garnsey.

Spring 2017. Internship Supervision.

Fall 2016. Designed and taught PHL317 Morality and Law.

Summer 2016. Designed online ethics course.

Spring 2016. Re-designed syllabus for History of Modern Philosophy course.

Spring 2016. Chair of Thesis Committee. Epistemically Detrimental Dissent in Climate Science. Iheanyi Amadi.

Spring 2016. Philosophy of Law course (uncompensated).

Summer 15. Introduced service component into ethics course.

Fall 14. Introduced LSAT preparation course.

Spring 13. Introduced PHL 391 Darwin and Design.

Spring 13. Introduced HC 395 Prelaw Seminar (uncompensated).

Spring 13. Independent Study – Philosophy of Physics – Olivia Weber.

Spring 11. Independent Study – Hume – Peter Conte.

Spring 11. Senior Honors Thesis Faculty Mentor – Morality within Possible Worlds – Scott Rezvani.

Spring 11. Senior Honors Thesis Faculty Mentor – Career Satisfaction in the Law – Brittany Harris.

Fall 2008-09. Sponsor of the Philosophy Society.

Fall 08. Three lectures for the Wildlife Biology program in Mike Mitchell's graduate seminar on the history of science and the scientific method.

Fall 08. Independent study – Lewis Hooker.

### University of Montana Service

2018-present. Pedagogy Project Fellow.

2018-present. Faculty Liaison for the Advising Center of the College of Humanities and Sciences.

2018-present. Academic Standards and Curriculum Review Committee Member.

2015-present. International Committee Member.

2008-present. Prelaw Program Director.

2008-present. Faculty Evaluation Committee Member.

2016, 2017, 2018. UM community giving campaign representative

2016, 2017. Reviewer for the University of Montana Conference for Undergraduate Research.

2013-2014. Dean of the Law School Search Committee Member.

2008-2009. Union Representative.

### **Professional Service**

#### Conference Committee Work:

- Program Committee Member, Central Division, 2019 Meeting.
- Program Committee Member for the 19th UK and European Conference on Foundations of Physics, Spring 2018.
- Scientific Committee Member and Reviewer for the *Rencontres Doctorales Internationales en Philosophie des Sciences* (RDIPS), Socit de Philosophie des Sciences, Paris: 2016, 2017, 2018.
- Scientific Committee for the Chair d'Excellence en Philosophie de la Physique, Grenoble, Fall 2017.
- Scientific Committee Member and Reviewer for the 2017 Scientific Realism and the Quantum (R&Q2017). University of Leeds. Spring 2017.

### Philosophy of Science Association:

- PSA Media Committee, Chair, since 2017.
- Underrepresented Philosophy of Science Student Mentoring Initiative Committee, Member, since 2016.
- Nominated for PSA governing board: Spring 2016.

• Editorial Board Member, Science Visions, PSA Women's Caucus since 2014.

#### Referee Work:

- Science, Technology and Society Panel Member for National Science Foundation. Fall 2016, Spring 2017.
- Referee for the Agence Nationale de la Recherche
- Referee for the Austrian Science Fund
- Referee for the National Science Foundation
- Referee for the British Journal for the Philosophy of Science, European Journal for Philosophy of Science, Erkenntnis, Igitur, Journal of General Philosophy of Science, Lato Sensu, Philosophia Scientiae, Philosophy of Science, Studies in History and Philosophy of Modern Physics, Synthese
- Referee for the Proceedings of the Logic, Methodology and Philosophy of Science 2012 International Congress.

#### Pre-Law:

- Member of the Western Association of Prelaw Advisors
- Member of the National Association of Prelaw Advisors

### References

Guido Bacciagaluppi Utrecht University g.bacciagaluppi@uu.n

Stephen Grimm Fordham University sgrimm@fordham.edu

Kevin Elliott Michigan State University kce@msu.edu