AXEL CONSTANT

Citizenships: Canadian, French (EU)

Languages: English, French

Programming languages: MATLAB, Python, C# for Unity 3D

Contact: A.Constant@sussex.ac.uk

AoS: Philosophy of Cognitive Science/Psychiatry/Mind

AoC: Philosophy of Science/Biology/Law

APPOINTMENT

Research Fellow 2022 - Present

 $Department\ of\ Engineering\ and\ Informatics,\ University\ of\ Sussex,\ UK$

Supervisor: Andy Clark

EDUCATION

Ph.D. in Philosophy 2019 - 2023

University of Sydney, ASTL

Dissertation: Evolution, Culture, and Computation in Psychiatry

Supervisors: Paul Griffiths, Paul Badcock, Karl Friston, and Laurence Kirmayer

Committee: Jakob Hohwy, Colin Klein

LL.B. in Law 2020 - 2022

Université de Montréal, CA

M.Sc. in Brain and Cognitive Science 2017 - 2019

University of Amsterdam, NL

Dissertation: Constructing Inference: A theory of niche construction for the cognitive sciences

Examiner: Julian Kiverstein

M.A. in Philosophy 2016 - 2017

Katholiek Universiteit Leuven, Leuven, BE

Dissertation: An ecological enactive approach to awe-like experiences: An awesome grip

Supervisors: Sander Van de Cruys and Maren Wehrle

Examiner: Stefaan Cuypers

B.A. in Philosophy 2013 - 2016

Université du Québec à Montréal, CA Minor in art history

Year Abroad (2014-2015), University of Exeter, UK

TEACHING

Sessional Lecturer

University of Montreal, Department of Philosophy

• Philosophy of Science, PHI1130 (Winter 2024)

Guest Lectures

University McGill, Division of Social and Transcultural Psychiatry

- Integrating Evolutionary Cultural and Computational Psychiatry: Culture, Mind and Brain Workshop, 19/06/23
- The Minimal and Strong Models in Psychiatry: Philosophy of Mind, PHIL606, 25/02/23
- Integrating Evolutionary Cultural and Computational Psychiatry, Culture, Mind and Brain Workshop, 19/06/22

FELLOWSHIPS AND ASSISTANTSHIPS

Visiting Researcher

Centre de Recherche en Éthique (CRÉ), Université de Montréal, CA

Project: Digital Minds Project

2022 - Present

Research Assistant

Cyberjustice Laboratory, University of Montreal, CA

Supervisor: Karim Benyekhlef

Project: Bayesian Models of Legal Syllogistic Reasoning

2022

Research Assistant

Class Action Lab, University of Montreal, CA

Supervisor: Catherine Piché

Project: Multilateral Reasoning in Class Action Certification

2021

Visiting Fellowship

Wellcome Trust Centre (Neuroimaging), University College London, UK 2019-2018

Doctoral Fellowship

Culture, Mind, and Brain Program, McGill University, Montreal, CA 2019

ACADEMIC SERVICES

Review Editor

Frontiers in Human Neuroscience 2023

Guest Editor

- Entropy: S.I. Karl Friston's 65th birthday (accepted)
- Entropy: S.I. "Applying the Free-Energy Principle to Complex Adaptive Systems" (2022)

Reviewer

- Philosophical Transactions of the Royal Society B.
- Synthese
- Philosophy of Science
- Neuroscience of Consciousness
- Psychological Review
- Adaptive Behaviors
- Biological Psychology
- Religion, Brain & Behavior
- Nature Scientific Report
- Biology and Philosophy
- Review of Philosophy and Psychology
- J. Conscious. Stud.
- Philosophical Psychology

SCHOLARSHIPS & PRIZES

- AUD 7,000 USYD PhD Completion Scholarship (2022)
- AUD 380 Andrew Donald Campbell Memorial Prize (2021)
- AUD 1,000 Lucy Firth Publication Prize (2019)
- AUD 110,000 Postgraduate Scholarship in the Philosophy of Biomedicine, Doctoral Scholarship, ref: FL170100160 (2019-2022)
- CAD 80,000 Social Sciences and Humanities Council of Canada, Doctoral Scholarship, ref: 752-2019-0065 (2019-2023)

SELECTED ACADEMIC PUBLICATIONS

- [12] Constant, A., (2024). Personomics: Precision Psychiatry Done Right. The British Journal for the Philosophy of Science. DOI
- [11] **Constant, A.**, Clark, A., and Friston, K. (2024). *Cultivating Creativity: Predictive Brains and the Puzzle of the Enlightened Room.* Philosophical Transactions B. DOI.
- [10] Constant, A. (2023). A Bayesian Model of Legal Syllogistic Reasoning. Artificial Intelligence and the Law. DOI
- [9] **Constant**, A., Badcock, P., Friston, K., & Kirmayer, L. J. (2022). *Integrating Evolutionary, Cultural, and Computational Psychiatry: A Multilevel Systemic Approach*. Frontiers in Psychiatry, 13, 763380. DOI
- [8] **Constant, A. (2021).** *The free energy principle: it's not about what it takes, it's about what took you there.* Biology & Philosophy. <u>DOI</u>
- [7] **Constant, A.**, Clark, A., & Friston, K. J. (2021). *Representation wars: Enacting an armistice through active inference*. Frontiers in Psychology, 11. <u>DOI</u>
- [6] **Constant, A.**, Hesp, C., Davey, C. G., Friston, K. J., & Badcock, P. B. (2021). Why Depressed Mood is Adaptive: A Numerical Proof of Principle for an Evolutionary Systems Theory of Depression. Computational Psychiatry (Cambridge, Mass.), 5(1), 60–80. DOI
- [5] **Constant, A.**, Tschantz, A. D. D., Millidge, B., Criado-Boado, F., Martinez, L. M., Müeller, J., & Clark, A. (2021). *The Acquisition of Culturally Patterned Attention Styles Under Active Inference*. Frontiers in Neurorobotics, 15, 729665. DOI
- [4] **Constant, A.**, Clark, A., Kirchhoff, M., & Friston, K. J. (2020). *Extended active inference: Constructing predictive cognition beyond skulls*. Mind & Language. DOI
- [3] Veissière, S. P. L., Constant, A., Ramstead, M. J. D., Friston, K. J., & Kirmayer, L. J. (2020). *Thinking through other minds: A variational approach to cognition and culture*. The Behavioral and Brain Sciences, 43. DOI
- [2] **Constant, A.**, Bervoets, J., Hens, K., & Van de Cruys, S. (2020). *Precise Worlds for Certain Minds: An Ecological Perspective on the Relational Self in Autism.* Topoi. An International Review of Philosophy, 39(3), 611–622. <u>DOI</u>
- [1] **Constant, A.,** Ramstead, M. J. D., Veissière, S. P. L., Campbell, J. O., & Friston, K. J. (2018). *A variational approach to niche construction*. Journal of the Royal Society, Interface / the Royal Society, 15(141). DOI

INVITED TALKS

ISHPSSB Conference

International Society for the History Philosophy and Social Studies of Biology biennial meeting University of Toronto, CA

• Developmental Niche Construction and Ecosocial Psychiatry (14/07/23)

Jewish General Hospital

Montreal, CA

• Looping effects in clinical practice (27/07/23)

SSPC Conference

The Society for the Study of Psychiatry and Culture University of San Diego, USA

• Looping effects in clinical practice (30/04/23)

Jewish General Hospital

Montreal, CA

• Cognitive assessments in computational psychiatry (21/04/23)

Jewish General Hospital

Montreal, CA

• Integrating Evolutionary Cultural and Computational Psychiatry (31/06/19)

Orygen Centre for Youth Mental Health

Melbourne, ASTL

• A simulation study of the Social Risk Hypothesis of Depression (05/06/19)

University of Melbourne

Psychology department

Melbourne, ASTL

• A simulation study of the Social Risk Hypothesis of Depression (04/06/19)

Macquarie University

Sydney, ASTL

• *Mapping and modeling the cognitive niche with active inference* (04/03/19)

Brain Meeting

Wellcome Trust Centre for Human Neuroimaging University College London, UK

• *Ecological inheritance and active inference* (05/10/18)