KERRY MCKENZIE

 $Associate\ Professor,\ Department\ of\ Philosophy,\ UC\ San\ Diego.$ www.kerrymckenzie.org \cdot kmckenzie@ucsd.edu

COMPETENCES

Areas of Specialization: Philosophy of Science, Metaphysics of Science.

Areas of Competence: Philosophy of Physics.

EDUCATION

PhD Philosophy, University of Leeds, UK.

August 2012

Dissertation: Physics Without Fundamentality: An Investigation into Anti-Fundamentalism about Particles and Laws in High-Energy Physics, supervised by Prof. Steven French.

MA History and Philosophy of Science, University of Leeds, UK

September 2008

BA (Hons.) Philosophy and Physics, University of Oxford, UK

June 2004

EMPLOYMENT

Associate Professor, Department of Philosophy, University of California at San Diego (July 2018 to present).

Assistant Professor, Department of Philosophy, University of California at San Diego (July 2014 to June 2018).

Postdoctoral Fellow in Philosophy and Science, University of Western Ontario, Canada (Sept. 2013 to July 2014).

Postdoctoral Fellow in Logic and Philosophy of Science, University of Calgary, Canada (Jan. to Aug. 2013).

PUBLICATIONS

Books

1. Fundamentality and Grounding (Cambridge Elements series), Cambridge University Press, 2021.

Articles and Book Chapters

- 22. 'Structuralism as a Stance', Philosophy of Physics.
- 21. 'Methods in the Metaphysics of Science', in *The Big Book of Philosophical Methods*, eds. Adrian Currie and Sophie Veigl, MIT Press.
- 20. 'On the prospects of an effective metaphysics', forthcoming in *The Structure of Reality and the Reality of Structure*, ed. F.A. Muller, Springer.
- 19. 'No grounds for effective theories', forthcoming in *Levels of Explanation*, eds. Alastair Wilson and Katie Robertson, Oxford University Press.
- 18. 'The "philosopher's stone": physics, metaphysics, and the value of a final theory', in *Beyond Spacetime: The Philosophical Foundations of Quantum Gravity (Volume II)*, eds. Nick Huggett, Baptiste Le Bihan, and Christian Wüthrich: Oxford University Press, 2021.
- 17. 'A curse on both houses: naturalistic versus *a priori* metaphysics and the problem of progress', *Res Philosophica* 97 (1):1-29, January 2020.
- 16. 'Science-Guided Metaphysics', in *Routledge Handbook of Metametaphysics* eds. Ricki Bliss and James Miller, 2020.

- 15. 'Structuralism in the Idiom of Determination', British Journal for the Philosophy of Science 10.1093/bjps/axx061, 2019.
- 14. 'Fundamentality', in *The Routledge Handbook of Emergence*, eds. Sophie Gibb, Robin Findlay Hendry, and Tom Lancaster, Routledge, 2019.
- 13. 'Against Brute Fundamentalism', dialectica 71 (2):231-261 (2017).
- 12. 'Ontic Structural Realism', Philosophy Compass, April 2017 (doi: 10.1111/phc3.12399).
- 11. 'Bound States and the Special Composition Question' (co-written with F.A. Muller), in *EPSA*15 Selected Papers: The 5th Conference of the European Philosophy of Science Association in Dusseldorf, eds. Michela Massimi, Jan-Willem Romeijn, and Gerhard Schurz.
- 10. 'Looking forward, not back: supporting structuralism in the present', in *Studies in History and Philosophy of Science (Part A)*, Volume 59, October 2016, Pages 87-94 (doi:10.1016/j.shpsa.2016.06.005.)
- 9. 'Rethinking Outside the Toolbox' (co-written with Steven French), in *Metaphysics in Contemporary Physics (Poznan Studies in Philosophy of the Sciences and the Humanities, vol. 104)*, eds. Tomasz Bigaj and Christian Wüthrich, pp. 25-54, Rodolpi: Brill (2015).
- 8. 'Relativities of Fundamentality', in *Studies in History and Philosophy of Modern Physics*, published online September 2015, doi:10.1016/j.shpsb.2015.08.001.
- 7. 'On the Fundamentality of Symmetries', Philosophy of Science 81, pp. 1090–1102, December 2014.
- 6. 'In No Categorical Terms: A Sketch for an Alternative Route to Humeanism about Fundamental Laws', in *New Directions in the Philosophy of Science*, eds. M. C. Galavotti, S. Hartmann, M. Weber, W. Gonzalez, D. Dieks and T. Uebel, pp. 45-61, Springer, 2014.
- 5. 'Structure and Logic' (co-written with Simon Saunders), in *Physical Theory: Method and Inter*pretation, ed. Lawrence Sklar, pp. 127-62, Oxford University Press (NY), 2014.
- 4. 'Priority and Particle Physics: Ontic Structural Realism as a Fundamentality Thesis', British Journal for the Philosophy of Science 65 (2): 353–80, 2013.
- 3. 'How Not To Be A Humean Structuralist', in *EPSA11: Perspectives and Foundational Problems in Philosophy of Science*, eds. V. Karakostas and D. Dieks, pp. 307–18, 2013.
- 2. 'Thinking Outside the Toolbox: Toward a More Productive Engagement Between Metaphysics and Philosophy of Physics' (co-written with Steven French), European Journal of Analytic Philosophy, Vol. 8, No. 1, pp. 42–59, 2012.
- 1. 'Arguing Against Fundamentality', Studies in History and Philosophy of Modern Physics, Vol. 42, No. 4, pp. 244–55, November 2011.

Book Reviews and Discussion Notes

- Review of 'Scientific Ontology: Integrating Naturalized Metaphysics and Voluntarist Epistemology' by Anjan Chakravartty, BJPS Review of Books, 2018.
- 5. 'Being realistic: the challenge of theory change meets the metaphysics of scientific realism', *Spontaneous Generations* Vol. 9, No. 1 (2018) 136-142.
- 4. 'Chance Regained: Review of After Physics by David Albert', Metascience, March 2016, 25 (1) pp. 51-55.
- 3. Review of *Metaphysics and Science*, eds. Stephen Mumford and Matthew Tugby, in the *British Journal for the Philosophy of Science*, doi: 10.1093/bjps/axu050, February 2015.

- 2. Review of Basic Structures of Reality: Essays in Meta-Physics by Colin McGinn, Mind, 122 (487), pp. 813–16, doi:10.1093/mind/fzt073, 2013.
- 1. 'How (and How Not) to Object to Objects', review of Structures, Objects and Causality: Proceedings of the Banff Workshop on Structural Realism, eds. Elaine Landry and Dean Rickles, Metascience, July 2013, Volume 22, Issue 2, pp 283–87.

SELECTED ACADEMIC SERVICE

- Director of Graduate Studies, Department of Philosophy, UCSD, Fall 2021 present.
- ♦ Incoming Director, UCSD Science Studies Program (slated 2024-27).
- ♦ President, Society for the Metaphysics of Science, 2019-21.
- ♦ Associate Editor, British Journal for the Philosophy of Science.
- ♦ Editorial Board, Philosophy of Physics and European Journal of Analytic Philosophy.
- Philosophy of Science Association Envoy to the American Council of Learned Societies, 2023-25.
- ♦ Chair, PSA Climate Taskforce.
- ♦ Member, PSA Nominating Committee (2020-21), with responsibility for nominating candidates for President and Governing Board.
- ♦ Pacific APA Program Committee 2018-20.
- ♦ Society for the Metaphysics of Science program committee 2019.
- ♦ *BSPS* programme committee 2017, 2018, 2023, 2024.
- ♦ Foundations of Physics programme committee 2018.
- ♦ Colloquium organizer, UCSD Science Studies program, 2019-21, 22-23.
- ♦ PSA poster committee 2016 and 2020 / 21.
- Referee for Analysis, Australasian Journal of Philosophy, The British Journal for the Philosophy of Science, Dialectica, Ergo, Erkenntnis, International Studies in Philosophy of Science, Internet Encyclopedia of Philosophy, Journal for General Philosophy of Science, Philosophical Quarterly, Philosopher's Imprint, Philosophy Compass, Philosophy of Science, Polish Journal of Philosophy, Review of Symbolic Logic, Studies in History and Philosophy of Modern Physics, Synthese, and Thought; publishers Routledge, Rodolpi, and Oxford University Press.
- ♦ Lecturer at First Biennial Midwest Summer School in Philosophy of Physics, Chicago 2018.
- ♦ Co-organizer of and SSHRC grant applicant for workshop 'Metaphysics Within and Without Physics', University of Western Ontario, June 2014.
- Referee, Polish National Science Centre, Swiss National Science Foundation, American Academy in Berlin.

SELECTED PRESENTATIONS

Invited presentations:

Physics, Metaphysics, and the Problem of Progress, Proteus project seminar, Milan (via Zoom) May 2023.

Structuralism as a Stance, workshop on David Wallace's 'Stating Structural Realism', March 2023.

Physics, Metaphysics, and the Problem of Progress, Quarterly Lectures in Philosophy of Science, Inductive Metaphysics research group, Germany (via Zoom), December 2022.

Structuralism as a Stance, PSA biennial conference, Pittsburgh, November 2022.

Presidential Address: The Plurality of Priority, Society of the Metaphysics of Science Annual Conference, September 2021.

Structuralism as a Stance, German Physical Society, August 2021.

Structuralism as a Stance, Harvard Foundations of Physics Workshop, February 2021.

Progress and its Problems: Coming to Terms with Theory Change in the Metaphysics of Science, Pittsburgh Center for Philosophy of Science, February 2020.

What's Essential to a Quantum Field?, Pittsburgh Early Career Quantum Field Theory Workshop. April 2019.

What's the Value of Metaphysics?, Res Philosophica speaker series, St. Louis University, March 2019.

Delusions of a Final Theory, Philosophy of Physics Workshop, Columbia University, October 2018.

Delusions of a Final Theory: Ontic Structural Realism and the Fiction of Fundamentality, Universitè de Montréal, October 2017.

Delusions of a Final Theory: Ontic Structural Realism and the Fiction of Fundamentality, Jowett Seminar, University of Oxford, June 2017.

What's Wrong with Structuralist Metaphysics? – Lessons from Pragmatism, Workshop III of 'Pragmatic approaches in Metaphysics and Philosophy of Science', Pittsburgh, April 2017.

What's Wrong with Structuralism?, Simon Fraser University, February 2017.

What's Wrong with Structuralism? UCI, March 2017.

Predicating Possibility: a legacy of positivism, University of Calgary, Canada, May 2016.

On the Prospects of a Present-Day Metaphysics, Science Studies Colloquium, UCSD April 2016.

On the Prospects of a Present-Day Metaphysics, UT Knoxville, February 2016.

Against Brute Fundamentalism, UIC, November 2015.

Against Brute Fundamentalism, seminar at CalTech, October 2015.

On the Prospects of an Effective Metaphysics, invited talk for the 15th Congress of Logic, Methodology and Philosophy of Science, Helsinki, August 2015.

Necessities in Nature without Natural Necessity: Rethinking Humanism about Fundamental Physics, Working Group in the History and Philosophy of Logic, Mathematics, and Science, UC Berkeley, April 2014.

On the Prospects of an Effective Metaphysics, UCLA Philosophy of Science Conference, March 7-8th 2015.

Necessity in Nature without Natural Necessity: Rethinking Humeanism about Fundamental Physics, Metaphysics and Philosophy of Physics Workshop, University of Rochester, September 2014.

Looking Forward, Not Back: Supporting Structuralism in the Present, 'Testing Structural Realism' conference, Case Western Reserve University, June 2014.

The Limits of Scientific Metaphysics, 'Metaphysics Within and Without Physics' conference, University of Western Ontario, May 2014.

The Plurality of Priority, Faculty Seminar, University of Cambridge, December 2013.

Prescriptions on Priority, Southern California Philosophy of Physics Research Group, UC Irvine, November 2013.

Off the Peg or Made to Order? – Reflections on Naturalistic Metaphysics, Bay Area Philosophy of Science meeting, San Fransisco State University, November 2013.

Two Puzzles about Priority, Faculty Seminar, University of Calgary, January 2013.

In No Categorical Terms: Two Alternative Routes to Humeanism, PSE-CRASSH joint workshop, University of Cambridge, December 2012.

Rethinking Outside the Toolbox, The Metametaphysical Club, Erasmus University, Rotterdam, November 2012.

Structuralism as a Priority Thesis: Past Progress and Open Questions, closing conference of the Foundations of Structuralism project, University of Bristol, September 2012.

Fundamentality Between Physics and Metaphysics: The Case of Effective Fields, Faculty Seminar, Universitat Autònoma de Barcelona, December 2011.

Between Humeanism and Nomological Essentialism: Locating Modality in Ontic Structuralism, Faculty Seminar, University of Bristol, May 2011.

Priority and Particle Physics: Structure, Dependence and Moderation in All Things, Workshop on Ontological Dependence, University of Bristol, February 2011.

Structures and Objects, Workshop on Structuralism and Objects, University of Notre Dame, Indiana, November 2010.

The Triviality Objection to Structuralism, Philosophy of Science Research Group Seminar, Ecole Normale Supérieure, Paris, June 2006.

Selected Conference Papers and Commentaries:

Comments on Chanwoo Lee, 'The Chasm Between Scientific and Analytic Metaphysics? A Case Study: Ontic Structural Realism Versus Ontological Nihilism', SMS Conference, Toronto, November 2019.

Delusions of a Final Theory: Ontic Structural Realism and the Fiction of Fundamentality, The Structure of Reality and the Reality of Structure workshop, Rotterdam, June 2019.

Delusions of a Final Theory, Philosophy of Science Association biannual conference, Seattle, November 2018.

Comments on Andreas Hüttemann, 'Fundamentality in Physics and Metaphysics', Society for the Metaphysics of Science III, New York City, October 2017.

Delusions of a Final Theory: On the folly of fundamentalist metaphysics, symposium paper at the APA (Pacific Division) conference, Seattle, April 2017.

On Realism and 'Deep Metaphysics', symposium paper at the APA (Eastern Division) conference, Baltimore, January 2017.

Structuralism in the Idiom of Determination, biennial meeting of the Philosophy of Science Association, Atlanta, Nov 2016.

Intrinsicality and The Goldilocks Principle: Fundamentality as a Resource for Structuralism, inaugural conference for the Society for the Metaphysics of Science, Rutgers, Newark NJ, Sept 2015.

Intrinsicality and The Goldilocks Principle: Fundamentality as a Resource for Structuralism, British Society for the Philosophy of Science Conference, University of Manchester, July 2015.

Undergraduate Level

INTRODUCTION TO PHILOSOPHY: THE NATURE OF REALITY (PHIL 14), UCSD Winter 2020.

PHILOSOPHY AND SCIENCE: THE BIG QUESTIONS (PHIL 25), UCSD Spring 2019.

METAPHYSICS (PHIL 130), UCSD Spring 2015, Spring 2017.

PHILOSOPHY OF SCIENCE (PHIL 145), UCSD Spring 2015, Spring 2016, Fall 2018.

SCIENTIFIC REASONING (PHIL 12), UCSD Winter 2015, Spring 2016, Spring 2017, Fall 2018.

THE PHILOSOPHY OF SEXUALITY AND GENDER, University of Western Ontario, Winter 2014.

Science and Philosophy, University of Calgary, Canada, Winter 2013.

TOPICS IN EPISTEMOLOGY: THEORY AND EVIDENCE, University of Leeds, UK, Winter 2012.

GRADUATE LEVEL

CONTEMPORARY EMPIRICISM, UC San Diego (Winter 2023).

NATURALISM AND NATURALISTIC METAPHYSICS, UC San Diego (Fall 2019).

INTRODUCTION TO SCIENCE STUDIES, UC San Diego Science Studies program (Fall 2017).

PROSEMINAR, UC San Diego (Fall 2016).

THE METAPHYSICS OF THE NON-FUNDAMENTAL, UC San Diego (Winter 2016).

PHYSICS AND THE METAPHYSICS OF FUNDAMENTALITY, UC San Diego (Fall 2014) and University of Calgary (Summer 2013).

FELLOWSHIPS, AWARDS AND SCHOLARSHIPS

Leverhulme Early Career fellowship (declined for Rotman Institute fellowship).

Post-Doctoral Research Fellowship in Philosophy and Science, Rotman Institute of Philosophy (University of Western Ontario), Sept. 2013–Aug. 2014 / 2015

Post-Doctoral Research Fellowship in Logic and Philosophy of Science, University of Calgary, Jan.-Sept. 2013.

Junior Fellowship, Descartes Centre, University of Utrecht, The Netherlands: Sept.—Dec. 2012.

Royal Institute of Philosophy Jacobsen Bursary, 2011-12

AHRC Research Training Support Grant, June 2011

Nominated for Postgraduate Researcher of the Year, University of Leeds (2010)

AHRC Doctoral Award, 2008-11 (full funding & fees)

AHRC Taught Masters Award 2007-8 (full funding & fees)