Isaac Wilhelm

Department of Philosophy National University of Singapore 3 Arts Link, Block AS3, #05-22 Singapore, 117570 CV as of Feb 2025 iwilhelm@nus.edu.sg isaacottoniwilhelm@gmail.com isaacwilhelm.com

RESEARCH AREAS

AOS: metaphysics, philosophy of science, philosophy of physics.

AOC: epistemology, feminist philosophy, logic.

EMPLOYMENT

National University of Singapore

Assistant Professor, Presidential Young Professorship

2021-present

EDUCATION

Ph.D. Philosophy: Rutgers	2015–21
M.S. Mathematics: Rutgers	2016 - 18
M.A. Philosophy: Tufts	2013 - 15
B.A./B.A. Mathematics, Cinema (both honors): Univ. Chicago	2007 - 11

BOOKS

Logic for Justice

2023

Routledge.

ARTICLES (ACADEMIC)

1. Talk About Types Forthcoming Mind.

- 2. Pure Type Systems and Generalized Grounding Forthcoming Philosophical Studies.
- 3. Wavefunction Mereology

 The British Journal for the Philosophy of Science.

 Forthcoming

4.	The Typical Principle The British Journal for the Philosophy of Science.	Forthcoming
5.	Disregard Hypatia.	Forthcoming
6.	The Value of Naturalness <i>Erkenntnis</i> .	Forthcoming
7.	Review of "Higher-Order Metaphysics" $Mind$.	Forthcoming
8.	Typicality First Philosophical Quarterly.	Forthcoming
9.	Bohmian Collapse In A. Bassi, S. Goldstein, R. Tumulka, and N. Zanghì, eds., <i>Physics and the Nature of Reality: Essays in Memory of Detlef Dürr</i> (pp. 63-70). Springer.	2024
10.	Explanatory Circles Studies in History and Philosophy of Science 108: 84-92.	2024
11.	The Propositional Account of Effective Theories <i>Philosophy of Science</i> 91: 1456-1466.	2024
12.	Worlds are Pluralities Australasian Journal of Philosophy 102: 221-231.	2024
13.	Centering the Born Rule Quantum Reports 5: 311-324.	2023
14.	Comparing Mathematical Explanations The British Journal for the Philosophy of Science 74: 269-290.	2023
15.	Constitution, Evidence, and an Argument for Realism <i>The Asian Journal of Philosophy</i> 46: 1-10.	2023
16.	Centering the Everett Interpretation Philosophical Quarterly 72: 1019-1039.	2022
17.	Intrinsicality and Entanglement Mind 131: 35-58.	2022
18.	Pluralities, Counterparts, and Groups Philosophical Studies 179: 2133-2153.	2022
19.	Tractability and Laws Synthese 200: 1-17.	2022
20.	Typical: a Theory of Typicality and Typicality Explanation The British Journal for the Philosophy of Science 73: 561-581. - Honourable mention, 2022 BJPS Popper Prize.	2022

21.	Centering the Principal Principle Philosophical Studies 178: 1897-1915.	2021
22.	Comparing the Structures of Mathematical Objects Synthese 199: 6357-6369.	2021
23.	Explanatory Priority Monism Philosophical Studies 178: 1339-1359.	2021
24.	Grounding and Propositional Identity Analysis 81: 80-81.	2021
25.	The Counteridentical Account of Explanatory Identities The Journal of Philosophy 118: 57-78.	2021
26.	A Statistical Analysis of Luck Synthese 197: 867-885.	2020
27.	An Argument for Entity Grounding Analysis 80: 500-507.	2020
28.	Interventionist Explanation and the Problem of Single Variable Boundary Constraints $No\hat{u}s$ 54: 945-955.	2020
29.	The Logic of Typicality In V. Allori, ed., Statistical Mechanics and Scientific Explanation: Determinism, Indeterminism and Laws of Nature (pp. 173-229). World Scientific. (with Harry Crane)	2020
30.	The Stage Theory of Groups Australasian Journal of Philosophy 98: 661-674.	2020
31.	Celestial Chaos: The New Logics of Theory-Testing in Orbital Dynamics Studies in History and Philosophy of Modern Physics 65: 97-102.	2019
32.	The Ontology of Mechanisms The Journal of Philosophy 116: 615-636.	2019
33.	New Data on the Representation of Women in Philosophy Journals: 2004-2015 Philosophical Studies 175: 1441-1464. (with Sherri Conklin and Nicole Hassoun)	2018
34.	The Representation of Belief Journal of Philosophical Logic 47: 715-732.	2018

PUBLIC PHILOSOPHY

1.	Mystical Rationality	2023
	In H. De Cruz and J. De Smedt, ed., Avatar: The Last Airbender and	
	Philosophy. Blackwell.	
2.	Why Christians should welcome face masks Messenger (January/February) 170: 27.	2021
3.	From Ants to Quantum Non-Locality The Daily Ant: Philosophy Phriday. (with Eddy Chen)	2017

PRESENTATIONS (SELECTED)

"The Metaphysics of Running Couplings"

- Michigan, April 2025.
- Colloquium, UC Davis, March 2025.

"I am Fundamental (and so are You)"

- Metaphysics Workshop, Berkeley, March 2025.

"Grounds for Effective Theories"

- Central APA (symposium), online, February 2025.
- SPAWN, Syracuse, June 2023.
- UCSD, April 2022.
- University of Geneva Speaker Seminar, online, December 2021.
- Society for the Metaphysics of Science, online, September 2021.

"Talk About Types"

- CHPS, Boulder, February 2025.
- Metaphysics Workshop, UCSD, October 2024.
- Metaphysics Conference, Lingnan, October 2024.
- Archè, St. Andrews, June 2024.
- Higher-Order Metaphysics Conference, Hamburg, March 2023.

"Typicality-Based Chance"

- PSA Symposium, New Orleans LA, November 2024.
- Quantities Workshop, Birmingham and online, July 2024.

"Centering Perfect Naturalness"

- Lewis and Quine Conference, Rutgers/NYU Workshop, Nov 2024.
- Jowett Society, Oxford, May 2023.

"Effective Theories, Fundamentality, and Energy Levels"

- Society for the Metaphysics of Science, online, August 2024.

[&]quot;Social Construction, Grounding, and Interventionism"

- Colloquium, NTU, Singapore, Sept 2024.
- Social Ontology, Durham NC, July 2024.

"Four Ontological Options for Best System Laws"

- Laws and Quantities Workshop, Glasgow/Stirling, June 2024.

"Reality is Fundamentally Predicational"

- Workshop on Rationality and Reality, UC Berkeley, March 2024.

"Typicality and Size"

- Pacific APA (symposium), Portland, March 2024.

"Grounding Meaning"

- MAPS, NYU, November 2023.

"Typicality First"

- CHPS, Boulder, December 2023.

"Wavefunction Mereology"

- FramePhys: Metaphysical Explanation in Physics, Birmingham, May 2023.

"Size and Rationality"

- Humean Workshop, Johns Hopkins, April 2023.

"Effective Theories Made Easy"

- PSA Symposium, Pittsburgh, November 2022.

"Centering the Everett Interpretation"

- Harvard Foundations of Physics Colloquium, Boston, November 2022.
- FASS Provost Brown-Bag Research Seminar, NUS, October 2022.
- Law and Probability Summer School (instructor), Budapest, July 2022.
- Laws Workshop, online, August 2020.

"The Big Bang, Fine Tuning, and the Existence of God"

- Tembusu College, Singapore, November 2022.
- Look at Life, Richmond IN, April 2019.

"Kinds are Groups"

- Social Ontology and Collective Intentionality, online, August 2022.

"Centering Update"

- Colloquium, ANU, July 2022.
- Colloquium, Koç University, April 2022.
- Colloquium, NUS, April 2022.

"Typed Composition as Typed Identity"

- Higher-Order Metaphysics Workshop, USC, June 2022.

"The Typical Principle"

- SUPC Keynote, June 2024.
- Law and Probability Summer School (instructor), Budapest, July 2022.
- Probability Seminar, online, November 2021.

"Meaning and Statespace"

- Explanation Between Logic and Philosophy, online, September 2021.

"The Counteridentical Account of Explanatory Identities"

- Super Saturday Seminars, online, August 2021.

"Gender is Essential to Some, But Not All, Individuals"

- Graduate Course, Notre Dame, October 2020.

"Pluralities, Counterparts, and Groups"

- Social Ontology, online, July 2020.

"Possible Worlds and the Upper Bound Problem"

- Central APA (colloquium), New Orleans, February 2021.
- Joint Session, University of Kent, July 2020.

"Centering the Principal Principle"

- Colloquium, Notre Dame, January 2021.
- Eastern APA (symposium), Philadelphia, January 2020.
- CCNY Philosophy of Physics Workshop, New York, May 2019.

"Typical"

- Eastern APA (symposium), New York, January 2019.
- MCMP, Munich, June 2018.

"Climate Surveying" (with Savannah Kincaid)

- Eastern APA, MAP session, New York, January 2019.

"Explanatory Priority Monism"

- Central APA (colloquium), Denver, February 2019.
- FramePhys Workshop on Explanatory Pluralism, University of Birmingham, June 2018.

"Comparative Structure"

- Canadian Society for the History and Philosophy of Science, University of Regina, May 2018.
- Society for Exact Philosophy, University of Connecticut, May 2018.
- Eastern APA (colloquium), Savannah, January 2018.
- British Society for the Philosophy of Science, Edinburgh, July 2017.

"The Ontology of Mechanisms"

- Society for the Metaphysics of Science, Toronto, November 2019.
- Composition Workshop, Rutgers-Newark, May 2018.
- Rutgers-Bochum Workshop, Rutgers, April 2018.

"Intrinsicality and Quantum Entanglement"

- Fifth International Summer School in the Philosophy of Physics, Saig, July 2017.
- Canadian Philosophical Association, Toronto, May 2017.

"Lawhood and Calculational Tractability"

- Pacific APA (colloquium), Seattle, April 2017.
- Western Canadian Philosophical Association, University of Alberta, October 2016.

"Sufficient and Necessary Conditions for Representability"

- NASSLLI, Rutgers University, July 2016.

"Chaos Regained: On the Possibility of a New Era of Orbital Dynamics"

- Society for the Philosophy of Science in Practice, Rowan University, June 2016.
- History of Philosophy of Science Conference, University of Minnesota, June 2016.

"Quantity, Property, and Fundamental Law"

- The Metaphysics and Epistemology of Grounding and Fundamentality, CUNY, December 2015.

COMMENTS AND PANELS

"Two varieties of underdetermination" (Tyler Hildebrand), commentator, SMS, August 2024.

"Effective Field Theory and Metaphysics" (Laura Ruetsche and Mike Miller), commentator, Pacific APA symposium, April 2023.

"Cournot's Principle and the Best-System Interpretation of Probability," panelist, Rutgers Probability Seminar, online, February 2022.

"Bohmian Mechanics and Local Reductive Explanation" (Alexander Franklin) commentator, Society for the Metaphysics of Science, online, September 2021.

"Constraining Inductive Metaphysical Inferences by Help of Internal Unification" (Kian Salimkhani), commentator, Society for the Metaphysics of Science, New York, October 2017.

"Grounding, Dependence and Mathematical Explanation" (Bill D'Alessandro), commentator, Eastern APA, Baltimore, January 2017.

GRANTS AND AWARDS

FASS Faculty Research Award

2024 - 25

- Awarded to less than three faculty at NUS (out of 400+).

FASS Writing Fellowship

2024 - 25

- Awarded to less than eight faculty at NUS (out of 400+).

NUS Research Grant	2024 – 25
ODPRT Grant for Research Excellence	2022-24
Presidential Young Professorship (\$400,000 USD)	2021–26
Rutgers Excellence Fellowship for Doctoral Studies (declined)	2021–22
SCP-Templeton Graduate Fellowship for Cross-Training in Physics (\$30,000)	2017–18
Rutgers Excellence Fellowship for Doctoral Studies	2015–17
TEACHING	
National University of Singapore	
- Philosophy of Science	Spring 2024
- Feminist Philosophy	Fall 2023
- Metaphysics	Fall 2023
- Philosophy of Science	Spring 2023
- Feminist Philosophy	Fall 2022
- Logic	Fall 2022
- Philosophy of Science (online)	Spring 2022
- Feminist Philosophy (online)	Spring 2022
- Chance and Uncertainty (online)	Fall 2021
Afghan Female Student Outreach	
- Plato (online)	Summer 2024
- Volunteer program offering free courses for Afghan women.	
- Accredited with the Open Society University Network.	
Rutgers	
- Introduction to Formal Reasoning and Decision-Making (online)	Summer 2020
- Introduction to Formal Reasoning and Decision-Making	Fall 2019
- Bioethics (online)	Summer 2019
- Introduction to Philosophy of Science	Spring 2019
- Introduction to Philosophy	Summer 2018
- At NJ Educational Opportunity Fund for disadvantaged students.	
Additional Teaching (select courses)	
- <u>Grade School</u>	
- Summer Program for Gifted Youth, two courses (Northwestern)	2013-14
- Saturday Program for Gifted Youth, twelve courses (Northwestern	•
- Young Scholar's Program, two courses (UChicago)	2008-10
- Adult Education	
- Conversation: ESL (Whatcom Literacy Council)	2021
- Mathematics: ESL (Whatcom Literacy Council)	2021
- Dark Foan Tutoring	

PROFESSIONAL SERVICE

Associate Editor, Australasian Journal of Philosophy

Program Committee, Society for the Metaphysics of Science

NUS Presidential Conferences (organizer or co-organizer; funder)

- 2025: Philosophy of Physics.

- 2024: (In)determinacy in Mathematics.

- 2023: Formal Epistemology.

PSA Symposium on Typicality (Organizer)

2024

- Participants: D. Albert, B. Loewer, T. Maudlin, R. Tumulka, and I. Wilhelm.

Referee 2017–present

- Analysis, Asian Journal of Philosophy, Australasian Journal of Philosophy, Bloomsbury, Canadian Journal of Philosophy, Ergo, Erkenntnis, European Journal for Philosophy of Science, Inquiry, Journal of Philosophical Logic, Journal of the APA, Noûs, Philosophia, Philosophia Mathematica, Philosophical Studies, Philosophical Quarterly, Philosophy of Physics, Philosophy of Science, Quantum Reports, Res Philosophica, Routledge, Statistical Science, Studies in History and Philosophy of Science, The British Journal for the Philosophy of Science, The Journal of Philosophy, The Southern Journal of Philosophy, Theoria, World Scientific.

Grant Reviewer, European Research Council	2024
Managing Editor, Oxford Studies in Philosophy of Religion (Vol. 9)	2019–20
Managing Editor, Oxford Studies in Metaphysics (Vol. 12)	2019–20
Marc Sanders Prize Organizer: Philosophy of Religion	2019–20
Marc Sanders Prize Organizer: Metaphysics	2019–20
Metro Area Philosophy of Science (MAPS), Colloquia (Organizer)	2017–19
Quantum Field Theories, Rutgers-Columbia Workshop (Co-Organizer)	2018
MAPS Pre-Workshop Workshop (Organizer)	2018
Filming/Editing Talks and Courses - Foundations of Probability Seminar.	2016–18
- Metaphysics of Fine Tuning Conference.	
- Center for Philosophy of Religion, Marc Sanders Lectures.	

Data Collection on Representation of Women in Philosophy

2016

UNIVERSITY AND DEPARTMENTAL SERVICE

NUS Presidential Colloquia

2022 - 26

- Organize and fund multiple colloquia talks each semester.

Reading Group, NUS (Organizer)

2023-present

Search Committees, NUS

2022-present

Graduate Admissions Committees, NUS

2022-present

Advising, Undergraduate Honors and Graduate, NUS

2022-present

Philosophy Interest Group, NUS (Faculty Advisor)

2024-25

Climate Committee, Rutgers

2015-20

- Organized three departmental climate surveys.
- Organized Rutgers Undergraduate Philosophers Mentorship program.

Philosophy of Science Reading Group, Rutgers (Organizer)

2016-20

FILM PRODUCTION

After college, I worked in documentary production for two years, before deciding to pursue a career in philosophy. During that period, I won some grants and directed some films. I also acquired audio and video editing skills, which I occasionally use in academic settings.

Sanders Lectures

120 minutes; 2018 (Fall); credited as editor. Published online.

120 minutes; 2018 (Spring); credited as editor. Published online.

120 minutes; 2017; credited as editor. Published online.

Luke Barnes on Fine Tuning, Rutgers Philosophy of Religion 2017

120 minutes; credited as editor: audio and video recording of Luke Barnes' 2017 lecture on fine tuning, sponsored by the Rutgers Center for the Philosophy of Religion. Published online.

Newton's Principia

75 hours; 2015; credited as editor: audio and video recording of a two-semester course on the science and philosophy of Newton's *Principia*.

American Diner

105 minutes; 2013; credited as director, DP, editor: a documentary about three small-town diners. Screenings: Kartemquin, Chicago; Doc Films, Chicago.

The Point

15 minutes; 2011; credited as director, sound producer, DP, editor: a documentary about Promontory Point. Screenings: Film Studies Center, University of Chicago.

Select Filmmaking Awards

- Kartemquin Labs Film Screening Review	2013
- Fire Escape Films: Travel Grant	2012
- Chicago Filmmakers Sponsorship Grant	2012
- Seidel Scholars PRISM Grant for Film Equipment (co-recipient)	2011