Isaac Wilhelm

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RESEARCH AREAS

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

AOC: logic, feminist philosophy.

EMPLOYMENT

National University of Singapore

Associate Professor
Assistant Professor, Presidential Young Professorship
2025—present
2021—25

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. Centering Update Forthcoming
The Journal of Philosophy.

2. Talk About Types Forthcoming Mind.

3.	Pure Type Systems and Generalized Grounding <i>Philosophical Studies</i> .	Forthcoming
4.	Wavefunction Mereology The British Journal for the Philosophy of Science.	Forthcoming
5.	The Typical Principle The British Journal for the Philosophy of Science.	Forthcoming
6.	Review of "Higher-Order Metaphysics" $Mind$.	Forthcoming
7.	Disregard Hypatia 40: 54-63.	2025
8.	The Value of Naturalness Erkenntnis 90: 625-644.	2025
9.	Typicality First Philosophical Quarterly 75: 1189-1209.	2025
10.	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
11.	Explanatory Circles Studies in History and Philosophy of Science 108: 84-92.	2024
12.	The Propositional Account of Effective Theories <i>Philosophy of Science</i> 91: 1456-1466.	2024
13.	Worlds are Pluralities Australasian Journal of Philosophy 102: 221-231.	2024
14.	Centering the Born Rule Quantum Reports 5: 311-324.	2023
15.	Comparing Mathematical Explanations The British Journal for the Philosophy of Science 74: 269-290.	2023
16.	Constitution, Evidence, and an Argument for Realism <i>The Asian Journal of Philosophy</i> 46: 1-10.	2023
17.	Centering the Everett Interpretation Philosophical Quarterly 72: 1019-1039.	2022
18.	Intrinsicality and Entanglement <i>Mind</i> 131: 35-58.	2022
19.	Pluralities, Counterparts, and Groups Philosophical Studies 179: 2133-2153.	2022

20.	Tractability and Laws Synthese 200: 1-17.	2022
21.	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
22.	Centering the Principal Principle Philosophical Studies 178: 1897-1915.	2021
23.	Comparing the Structures of Mathematical Objects Synthese 199: 6357-6369.	2021
24.	Explanatory Priority Monism Philosophical Studies 178: 1339-1359.	2021
25.	Grounding and Propositional Identity Analysis 81: 80-81.	2021
26.	The Counteridentical Account of Explanatory Identities The Journal of Philosophy 118: 57-78.	2021
27.	A Statistical Analysis of Luck Synthese 197: 867-885.	2020
28.	An Argument for Entity Grounding Analysis 80: 500-507.	2020
29.	Interventionist Explanation and the Problem of Single Variable Boundary Constraints $No\hat{u}s$ 54: 945-955.	2020
30.	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
31.	The Stage Theory of Groups Australasian Journal of Philosophy 98: 661-674.	2020
32.	Celestial Chaos: The New Logics of Theory-Testing in Orbital Dynamics Studies in History and Philosophy of Modern Physics 65: 97-102.	2019
33.	The Ontology of Mechanisms The Journal of Philosophy 116: 615-636.	2019
34.	New Data on the Representation of Women in Philosophy Journals: 2004-2015 Philosophical Studies 175: 1441-1464. (with Sherri Conklin and Nicole Hassoun)	2018

35. The Representation of Belief

Journal of Philosophical Logic 47: 715-732.

2018

PUBLIC PHILOSOPHY

1. Mystical Rationality
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

2017

The Daily Ant: Philosophy Phriday. (with Eddy Chen)

PRESENTATIONS (SELECTED)

"Centering Free Will"

- Umeå, June 2025.

"Centering Cosmological Calculations"

- Toronto Metropolitan University, June 2025.

"The Metaphysics of Running Couplings"

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

"Talk About Types"

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

"Social Construction, Grounding, and Interventionism"

- Metaphysics Collaborative, Online, April 2025.
- Colloquium, NTU, Singapore, Sept 2024.
- Social Ontology, Durham NC, July 2024.

"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.

"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.

"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"

- Metro Area Philosophy of Science, 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

- Chance and Uncertainty: fall 2021 (online).
- Feminist Philosophy: fall 2025, fall 2023, fall 2022, spring 2022 (online).
- Metaphysics: fall 2025, fall 2023.
- Philosophy of Science: spring 2024, spring 2023, spring 2022 (online).
- Logic: fall 2022

Afghan Female Student Outreach

- Plato: summer 2024 (online).
 - Volunteer program offering free courses for Afghan women.
 - Accredited with the Open Society University Network.

Rutgers

- Intro to Formal Reasoning and Decision-Making: summer 2020 (online), fall 2019.
- Bioethics: summer 2019 (online).
- Intro to Philosophy of Science: spring 2019.
- Intro to Philosophy: summer 2018.
 - At NJ Educational Opportunity Fund for disadvantaged students.

Additional Teaching (select courses)

- Grade School
 - Summer Program for Gifted Youth, two courses (Northwestern) 2013–14
 - Saturday Program for Gifted Youth, twelve courses (Northwestern) 2011–13

- Young Scholar's Program, two courses (UChicago)	2008–10
- <u>Adult Education</u> - Conversation: ESL (Whatcom Literacy Council)	2021
- Mathematics: ESL (Whatcom Literacy Council)	2021
- Dark Foan Tutoring	
- Tutoring business owner and founder; 22 full-time students.	2011–13
PROFESSIONAL SERVICE	
Area Editor, Ergo	2025-present
Associate Editor, Australasian Journal of Philosophy	2024-present
Outreach Committee, Asian Philosophy of Science Association	2025
NUS Presidential Conferences (organizer; co-organizer; funder)	2022–26
- 2025: Philosophy of Physics.	
- 2024: (In)determinacy in Mathematics.- 2023: Formal Epistemology.	
Grant Reviewer, European Research Council	2024
Program Committee, Society for the Metaphysics of Science	2024
PSA Symposium on Typicality (organizer) - Participants: D. Albert, B. Loewer, T. Maudlin, R. Tumulka, and I.	2024 Wilhelm
Referee	2017–present
- Analysis, Asian Journal of Philosophy, Australasian Journal of Philosophy, Canadian Journal of Philosophy, Disputatio, Episteme, Ergo, pean Journal for Philosophy of Science, Foundations of Science, Philosophical Logic, Journal of the APA, Metaphysics, Noûs, Philosophical Research, Philosophical Studies, Philosophical Quarterly, Philosophical Research, Philosophy of Physics, Philosophy of Science, Quarterly, Philosophica, Routledge, Statistical Science, Studies in History and ence, The British Journal for the Philosophy of Science, The Journal of Philosophy, Theoria, World Scientific.	hilosophy, Blooms- Erkenntnis, Euro- inquiry, Journal of sophia, Philosophia phy and Phenomeno ntum Reports, Res Philosophy of Sci-
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, Colloquia (organizer)	2017–19
	2010

Quantum Field Theories, Rutgers-Columbia Workshop (co-organizer)

Metro Area Philosophy of Science Pre-Workshop Workshop (organizer)	2018
 Filming/Editing Talks and Courses Foundations of Probability Seminar. Metaphysics of Fine Tuning Conference. Center for Philosophy of Religion, Marc Sanders Lectures. 	2016–18
Data Collection on Representation of Women in Philosophy	2016
UNIVERSITY AND DEPARTMENTAL SERVICE	
Deputy Head of Department	2025–28
NUS Presidential Colloquia - Organize and fund multiple colloquia talks each semester.	2022–26
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 - Organized three departmental climate surveys Organized Rutgers Undergraduate Philosophers Mentorship program.	2015–20
Seminar on Foundations of Probability, Rutgers (organizer)	2019–20

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.

Philosophy of Science Reading Group, Rutgers (organizer)

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.

2016-20

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