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WEBSITE	<a href="http://www.eddykemingchen.net">www.eddykemingchen.net</a>	
SPECIALIZATION (AOS)	Philosophy of Physics; Philosophy of Science; Metaphysics.	
COMPETENCE (AOC)	Chinese Philosophy; Decision Theory; Formal Epistemology; Philosophy of Mathematics; Philosophy of Religion.	
EMPLOYMENT	Assistant Professor, <b>Department of Philosophy, University of California, San Diego</b>	Jul 2019—
OTHER AFFILIATIONS	Associate Editor, <i>Foundations of Physics</i>	Jul 2020—
	Fellow, John Bell Institute for the Foundations of Physics	Aug 2018—
	Affiliated Faculty, Chinese Studies Program, UC San Diego	Jan 2020—
EDUCATION	<b>Rutgers University, New Brunswick</b>	
	Ph.D., Philosophy, May 2019	
	<ul style="list-style-type: none"> <li>• Thesis: <i>Essays on the Metaphysics of Quantum Mechanics</i></li> <li>• Committee: Barry Loewer (co-chair), David Albert (co-chair), Sheldon Goldstein (mathematics), Tim Maudlin (external), Jill North, Jonathan Schaffer, Ted Sider</li> </ul>	
	M.Sc., Mathematics (Mathematical Physics), May 2019	
	<ul style="list-style-type: none"> <li>• Thesis: <i>Quantum Mechanics in a Time-Asymmetric Universe</i></li> <li>• Committee: Sheldon Goldstein (chair), Michael Kiessling, Joel Lebowitz, Roderich Tumulka</li> </ul>	
	Graduate Certificate in Cognitive Science, Dec 2018	
	<ul style="list-style-type: none"> <li>• Thesis: <i>Comparativism about Mental Qualities</i></li> <li>• Advisor: Matthew Stone</li> </ul>	
	<b>Calvin College</b>	
	B.S., Mathematics (Major), Physics (Minor), May 2013	
	B.A., Philosophy (Highest Honors), May 2013	
	<ul style="list-style-type: none"> <li>• Thesis: <i>Singular Propositions, Truth-In/At, and Modality De Re/De Dicto</i></li> <li>• Supervisors: Alvin Plantinga and Stephen Wykstra</li> </ul>	
	<b>National University of Singapore</b>	
	Enrolled in Mathematics and Physics Undergraduate Modules, 2009-2010	

VISITING FELLOWSHIPS	<p><b>Australian National University</b> Research School of Social Sciences, Faculty Sponsor: Alan Hájek</p> <p><b>University of Southern California</b> Department of Philosophy, Supervisor: David Wallace</p> <p><b>University of Bristol</b> Department of Philosophy, Faculty Sponsor: Richard Pettigrew</p> <p><b>University of Oxford</b> Undergraduate Visiting Student</p>	<p>Jun-Jul 2017</p> <p>Mar-Apr 2017</p> <p>Sep 2016</p> <p>Jan-Apr 2012</p>
BOOK UNDER CONTRACT	<ol style="list-style-type: none"> <li>1. <i>Laws of Physics</i> Cambridge Elements in Philosophy of Physics, <i>Cambridge University Press</i>, in preparation</li> </ol>	
ARTICLES	<ol style="list-style-type: none"> <li>1. “Fundamental Nomic Vagueness” <i>The Philosophical Review</i>, forthcoming [arXiv:2006.05298]</li> <li>2. “From Time Asymmetry to Quantum Entanglement: The Humean Unification” <i>Noûs</i>, 2020. [arXiv:2006.05029] [Journal]</li> <li>3. “Realism about the Wave Function” <i>Philosophy Compass</i>, 2019 [arXiv:1810.07010][Journal]</li> <li>4. “Quantum Mechanics in a Time-Asymmetric Universe: On the Nature of the Initial Quantum State” <i>The British Journal for the Philosophy of Science</i>, 2018. [arXiv:1712.01666] [Journal]</li> <li>5. “Our Fundamental Physical Space: An Essay on the Metaphysics of the Wave Function” <i>The Journal of Philosophy</i>, 114(7), 2017: 333-65. [Penultimate] [Journal]</li> <li>6. (with Daniel Rubio) “Surreal Decisions” <i>Philosophy and Phenomenological Research</i>, 2018. [Penultimate] [Journal]</li> <li>7. (with Daniel Rubio) “Great Expectations: Introducing Surreal Decision Theory” Wiebe van der Hoek, Wesley H. Holliday, Wen-fang Wang (eds.), <i>Proceedings of the 5th International Workshop on Logic, Rationality, and Interaction (LORI-V)</i>, Volume LNCS 9394, pp. 53–63. Springer-Verlag Berlin Heidelberg, 2015. [Proceedings]</li> </ol>	
CHAPTERS IN EDITED VOLUMES	<ol style="list-style-type: none"> <li>1. “The Past Hypothesis and the Nature of Physical Laws” Barry Loewer, Eric Winsberg, and Brad Weslake (ed.), <i>Times Arrows and the Probability Structure of the World</i>, Harvard University Press, forthcoming [arXiv:2008.00611]</li> <li>2. “Time’s Arrow in a Quantum Universe: On the Status of Statistical Mechanical Probabilities” Valia Allori (ed.), <i>Statistical Mechanics and Scientific Explanation: Determinism, Indeterminism and Laws of Nature</i>, World Scientific, 2020 [arXiv:1902.04564] [Book]</li> <li>3. “Bell’s Theorem, Quantum Probabilities, and Superdeterminism” Eleanor Knox and Alastair Wilson (eds.) <i>The Routledge Companion to the Philosophy of Physics</i>, forthcoming [arXiv:2006.08609]</li> </ol>	

4. “The Cosmic Void”  
Sara Bernstein and Tyron Goldschmidt (eds.), *Non-Being: New Essays on the Metaphysics of Non-Existence*, Oxford University Press, forthcoming. [PhilPapers]

BOOK REVIEW

1. Richard Healey, *The Quantum Revolution in Philosophy*  
*The Philosophical Review*, 129 (2): 302-308, 2020. [Journal]

UNDER REVIEW

1. “The Intrinsic Structure of Quantum Mechanics” [arXiv:1810.06551]
2. “Our Knowledge of the Past: Some Puzzles about Time’s Arrow and Self-Locating Probabilities” [arXiv:2001.09972]
3. (with Roderich Tumulka) “Uniform Probability Distribution over All Density Matrices” [arxiv:2003.13087]

PAPERS IN PREPARATION

1. “Comparativism about Mental Qualities”
2. (with Sheldon Goldstein) “Minimal Primitivism about Laws of Nature”
3. (with Daniel Rubio) “Surreal Decision Theory for Infinite State Spaces”
4. “A Hybrid Voluntarist Interpretation of Xunzi”

POPULAR WRITINGS

1. “Welcome to the Fuzzy-Verse” (based on “Nomic Vagueness”)  
Featured on the cover as “The Flaw at the Heart of Reality: Why precise mathematical laws can never fully explain the universe”  
*New Scientist*, Issue 3298, Sep 5, 2020 [Penultimate] [Magazine]
2. (With Isaac Wilhelm) “From Ants to Quantum Non-Locality”  
*The Daily Ant*, July 2017 [Link]

SELECTED HONORS AND AWARDS

Rutgers University	
• <b>Harvey Waterman Medal of Excellence</b>	2019
• Presidential Fellowship for Doctoral Studies	2013, 14, 17
• SCP-Templeton Graduate Fellowship for Cross Training in Physics	2017-18
• Mellon Fellowship for Summer Research	2017
• APA Graduate Student Travel Stipend	2016
• Rutgers Graduate School Travel Stipend	2014, 15, 16
• Summer Special Study Fellowship	2015, 16
Calvin College	
• Presidential Scholarship	2010-13
• William Rinck Memorial Prize for Best Graduating Senior in Mathematics	2013
• Van Der Woude Award in Science Division	2011, 12
• Bouwsma Prize for Best Paper in Philosophy	2013
• Bouwsma Award for Excellence in Philosophy	2011
• Konyndyk Scholarship for Excellence in Philosophy	2011
National University of Singapore	
• SM2-GLC Undergraduate Full Scholarship, Ministry of Education, Singapore	2007-10
• The University Scholars Program	2009-10
• Valedictorian for SM2-GLC Scholarship Recipients	2009

SELECTED  
PRESENTATIONS

**Nomic Vagueness**

- 27th Biennial Meeting of the Philosophy of Science Association Nov 2021
- (Invited) Pontifical University of St. Thomas Aquinas, Italy Jan 2021
- (Invited) Harvard Foundations of Physics Mini-Workshop July 2020
- (Invited) CalTech philosophy of physics reading group May 2020
- (Invited) Delta 13 Workshop on Logic May 2020
- (Invited) University of Illinois, Chicago Feb 2020
- (Invited) Foundations of Physics Conference, Columbia University Nov 2019
- (Invited) Early Career Philosophy of Physics Workshop, CCNY May 2019

**The Wentaculus: Density Matrix Realism Meets the Arrow of Time**

- (Invited) Philosophy of Physics Research Seminars, University of Oxford Jan 2021
- (Invited) Density Matrix Realism Workshop, University of Birmingham Nov 2020

**Boltzmannian Quantum Statistical Mechanics**

- (Invited) Black Forest Summer Conference on Foundations of Physics (Cancelled due to COVID-19) Jul 2020

**Varieties of Intrinsicity**

- *Science Without Numbers*: 40 years later Nov 2020

**The Cosmic Void and Non-Fundamental Facts**

- (Invited) APA Symposium “Metaphysics Without Ontology” Feb 2020

**From Time Asymmetry to Quantum Entanglement: The Humean Unification**

- (Invited) Humean Laws Workshop June 2020

**Time’s Arrow in a Quantum Universe**

- (Invited) Mathematical Physics Seminar, University of Tübingen Mar 2019
- (Invited) University of California, San Diego Feb 2019
- (Invited) University of Wisconsin, Madison Jan 2019
- (Invited) Tsinghua University (commented by Shan Gao) Jan 2019
- (Invited) Wuhan University Jan 2019
- (Invited) HUST (commented by Wan Xiaolong) Jan 2019
- (Invited) Cornell University Feb 2018
- (Invited) University of Wisconsin, Milwaukee Feb 2018
- Philosophy of Cosmology Session, German Physical Society, Munich Mar 2019
- Philosophy of Science Association, Seattle Oct 2018
- Summer School on Entropy, Split Jul 2018
- Western Ontario Philosophy of Logic, Mathematics, and Physics Graduate Student Conference Jun 2018
- Rotman Summer Institute in Philosophy of Cosmology Jun 2018

**Time’s Arrow Without Statistical Mechanical Probabilities**

- Philosophy of Time Association, Central APA, Denver Feb 2019
- Rutgers Seminar on the Foundations of Probability Nov 2018

**Comparativism about the Mind: From Metaphysics of Quantities to the Nature of Mentality**

- (Invited) Rutgers-Bochum Workshop in Philosophy and Cognitive Science, Bochum Mar 2019
- 24th World Congress of Philosophy, Beijing Aug 2018

**An Intrinsic Theory of Quantum Mechanics: Progress in Field’s Nominalistic Program**

- (Invited) UC Irvine, Logic and Philosophy of Science (LPS) Apr 2017
- (Invited) Bristol Center for Science and Philosophy Sep 2016

- Pacific APA Symposium (commented by Thomas Barrett and Rhys Borchert) Mar 2018
- 3rd Annual Meeting of the Society for the Metaphysics of Science (SMS), Oct 2017  
Fordham University (commented by David Glick)
- 18th UK and European Conference on Foundations of Physics, London Jul 2016
- 4th Black Forest Philosophy of Physics Summer School, Saig Jul 2016

**Our Fundamental Physical Space: An Essay on the Metaphysics of the Wavefunction**

- (Invited) University of Illinois, Chicago Mar 2016
- Central APA Symposium (commented by Nick Huggett), Chicago Mar 2016
- 1st Annual Meeting of the Society for the Metaphysics of Science (SMS), Oct 2015  
Rutgers University-Newark (commented by Vishnya Maudlin)
- 3rd Black Forest Philosophy of Physics Summer School, Saig Jul 2015

**The Best Summary of the Quantum World: The Universal Wavefunction as a Humean Law**

- (Invited) Tsinghua University Philosophy of Science Colloquium Dec 2015
- 15th Congress of Logic, Methodology, and Philosophy of Science, University of Helsinki (CLMPS) Aug 2015
- 2nd Black Forest Philosophy of Physics Summer School, Saig Jul 2014
- Princeton Workshop on Technical Philosophy of Physics Mar 2014

**Our Knowledge of the Past: Some Puzzles about Time's Arrow and Self-Locating Probabilities**

- (Invited) 3rd Boulder Workshop in Formal Value Theory Mar 2018
- (Invited) The College of William and Mary Jan 2018
- (Invited) Wuhan University Dec 2017
- (Invited) CalTech, History and Philosophy of Science Series Apr 2017
- (Invited) University of Bristol Sep 2016
- Sydney University Winter School on Physics and Philosophy of Time (Winner of the book prize for the best presentation) Jul 2017
- Australasian Association of Philosophy (AAP) Annual Meeting, the University of Adelaide Jul 2017
- Time and Causality in the Sciences Conference (TaCitS), Stevens Institute of Technology Jun 2017
- UC San Diego, Philosophy Apr 2017
- UC Riverside Workshop on Epistemology and Philosophy of Mind Mar 2017

**Space-Time Emergence: A Representational Theory**

- (Invited) Philosophy of Cosmology Workshop, CUNY Graduate Center May 2017

**Great Expectations: Introducing Surreal Decision Theory** (co-authored with Daniel Rubio)

- (Invited) Peking University Colloquium on Logic, Language, and Cognition Dec 2015
- (Invited) Princeton Workshop on Intrinsic Values (Sanders Foundation Website Video Link) Nov 2015
- 5th International Congress on Logic, Rationality, and Interaction, National Taiwan University (LORI V) Oct 2015
- 15th Congress of Logic, Methodology, and Philosophy of Science, University of Helsinki (CLMPS) Aug 2015
- Pittsburgh-CMU Graduate Conference in Philosophy Mar 2015

**Pascal's Wager Meets Surreal Numbers** (co-authored with Daniel Rubio)

- (Invited) Work-in-Progress reading group, Bristol University Sep 2016
- (Invited) Xiamen University Philosophy Department May 2016

- A Xunzian Puzzle about Meta-Ethics**
- (Invited) Skype lecture in Hu Jing’s seminar on Chinese Philosophy at Washington and Lee University Mar 2016
- What is Analytic Philosophy?**
- (Invited) Department of Electrical Engineering, Wuhan University Jan 2016
- Singular Propositions, Ontological Dependence, and the ‘Truth-in/-at’ Distinction**
- Calvin College Philosophy Symposium Nov 2012
- Quantum Modeling of Recollision Excitation and Non-Sequential Double Ionization of Helium**
- Western Michigan Regional Undergraduate Science Research Conference Oct 2012  
Van Andel Institute, Grand Rapids, Michigan
  - Calvin College Physics Departmental Seminar Sep 2012

COMMENTS

- Alan Hájek’s “The Revenge of Pascal, Petersburg, Pasadena, and Paul”**
- (Invited) Workshop on Cognitive Values, CU Boulder Mar 2017
- Ned Hall’s “Causation and the Aim of Inquiry”**
- Rutgers Philosophy Department Colloquium Feb 2016
- Niels Martens’s “Comparativism about Mass and the Initial Variable Problem”**
- (Invited) Metaphysics of Quantities Conference, NYU May 2015
- Thomas Senor’s “Disagreement, Evidence, and Perception”**
- (Invited) Meiguo Metaphysics Mayhem, Peking University Jun 2012

TEACHING

- At University of California, San Diego
- PHIL 158 - Topics in Chinese Philosophy Fall 2020
  - PHIL 120 - Symbolic Logic Fall 2020
  - PHIL 285 - Core Seminar in Philosophy of Science Spring 2020
  - PHIL 130 - Metaphysics Spring 2020
  - PHIL 146 - Philosophy of Physics Fall 2019
- At Rutgers University, New Brunswick
- PHIL 319 - Philosophy of Mathematics Fall 2016
  - PHIL 475 - Chinese Philosophy Spring 2016
- Co-Chair (with Harry Crane and Dimitris Tsementzis) Fall 2016 - Spring 2018
- PHIL 603 - Graduate Seminar on the Foundations of Probability  
Joint Seminar of Philosophy and Statistics Depts., Rutgers University
- Member of Dissertation Committees for:
- JiMin Kwon (UCSD)
  - Joseph Martinez (UCSD)
- Member of Third-Year Paper Committees for:
- Eugene Chua (UCSD)
- First Year Advisor for:
- Weixin Cai (UCSD)
- Independent Studies:
- Greyson Sims (UCSD): Philosophy of Quantum Mechanics, Fall 2020

## SERVICE

## Conferences and Events

- Program committee, Society for the Metaphysics of Science (delayed to 2021 due to COVID-19)
- Co-Organizer, conference “*Science Without Numbers, 40 Years Later*” Nov 2020
- Co-Organizer, UCSD Philosophy of Physics Reading Group 2020–
- Co-Organizer, Rutgers-Columbia Workshop on Quantum Field Theories May 2018
- Organizer, Rutgers Workshop on Structural Realism May 2017
- Co-Organizer, Rutgers Workshop on Multiverse, Theodicy, and Fine-Tuning Jun 2016
- Organizer, Metro Area Philosophy of Science Lecture Series (MAPS) 2015-17
- Organizer, Rutgers Philosophy of Science Reading Group 2014-16
- Co-organizer, Rutgers Metaphysics Reading Group 2015-16
- Rutgers Philosophy Department Colloquium Committee 2014-16

## Contributions to Diversity and University Service

- Designer and grader of graduate student logic exemption test Sep 2020
- Reviewer, undergraduate honors thesis in philosophy of physics Apr 2020
- Graduate admissions subcommittee in logic and philosophy of science Jan 2020
- Mock interviewer for job-market candidates Jan 2020
- Participation in the design and proposal of the Chinese philosophy class Nov 2019
- Panelist, admissions committee, and advisory board, Summer Program for Women in Philosophy, UCSD 2019-20
- Faculty speaker, Preparing Accomplished Transfers to the Humanities (PATH) Program, San Diego Community College District Dec 2019
- Commentator-at-large, New York-China Epistemology Conference Oct 2018
- Rutgers Philosophy Department Climate Committee 2016-17
- Graduate Panelist, Rutgers Summer Institute for Diversity in Philosophy Jul 2017
- Rapporteur, 3rd and 4th Rutgers Workshops on Chinese Philosophy 2016, 2017
- Participant, Muslim-Jewish-Christian Interfaith Dialogue on Providence and Randomness May 2016
- Discussion Leader, Rutgers University International TA Orientation Aug 2016

## REFEREE

- *Australasian Journal of Philosophy* (×4)
- *British Journal for the Philosophy of Science* (×6)
- *Erkenntnis* (×5)
- *Ergo* (×2)
- *European Journal for Philosophy of Science* (×4)
- *Foundations of Physics*
- *Internet Encyclopedia of Philosophy*
- *Journal of the American Philosophical Association*
- *Journal for General Philosophy of Science* (×2)
- *Mind* (×2)
- *Noûs*
- *Pacific Philosophical Quarterly*
- *Philosophers' Imprint*
- *Philosophical Studies* (×3)
- *Philosophy of Science* (×6)
- *Proceedings of the Italian Society for Logic and Philosophy of Science*
- *Statistical Science*
- *Studies in History and Philosophy of Science Part A* (×2)
- *Studies in History and Philosophy of Science Part B: Studies in History and Philosophy of Modern Physics* (×5)
- *Synthese* (×8)
- *Theoria*

- *Theory of Science*
- *Cambridge University Press*
- *Springer*
- *Routledge*
- *European Research Council*
- *The Atlantic*
- *Bloomsbury Academic*

OTHER WORK  
AND RESEARCH

- Editorial Assistant** Spring 2017  
For Ernest Sosa and Georgi Gardiner  
*Nôus, PPR, Philosophical Issues*
- National Science Foundation (NSF) Research Fellowship** Summer 2012  
Topic: Theoretical Physics and Computer Modeling:  
Recollision Excitation and Non-Sequential Double Ionization of Helium  
Supervisor: Stan L. Haan  
Department of Physics,  
Calvin College
- Summer Research Fellowship** Summer 2011  
Topic: Mencius (Mengzi) and the Concept of Tian  
Supervisor: Kelly James Clark  
Department of Philosophy,  
Calvin College
- Undergraduate Research Assistant** 2008-2010  
Topic: Membrane Distillation for Water Purification with Reverse Osmosis  
Supervisor: Tai-Sheng Chung  
Chemical and Biomolecular Engineering,  
National University of Singapore
- Intern at *The New York Times*** Summer 2010  
Interviews, data analysis, and research on business, economics, culture,  
and the arts in China  
Supervisor: **David Barboza** (2013 Pulitzer Prize Winner)  
*The New York Times*, Shanghai Bureau