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## Academic Position

Koç University, Assistant Professor (tenure-track), 2020-current.

## Education

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|-------|--|
| Ph.D. | Philosophy, University of Massachusetts Amherst. 2014-2020.<br>Committee Members: Phillip Bricker (chair), Alejandro Perez Carballo, Jeffrey Sanford Russell (USC), Alexei Oblomkov (Mathematics)<br>Dissertation: <i>Continua</i> . |
| M.A.  | Philosophy, University of Wisconsin, Milwaukee, 2012-2014.<br>Calvin College, visiting student, 2011-2012.   |
| M.A.  | Philosophy, Fudan University, Shanghai, 2009-2012.   |
| B.A.  | Philosophy (with the Dean's Award), Fudan University, Shanghai, 2005-2009.   |

## Areas of Specialization

Metaphysics, Philosophy of Science, Logic

## Areas of Competence

Decision theory, Applied Ethics, Philosophy of Mind

## Publications

In reverse temporal order:

- “An Algebraic Approach to Physical Fields” with Tobias Fritz, *Studies in History and Philosophy of Science* (2021).

We propose a novel algebraic approach to physical theories according to which physical fields exist without an underlying manifold. Comparing to the standard formulation, our approach does not posit a ghostly scalar field in lieu of spacetime but treats all and only physical fields as fundamental. We use natural operations in category theory to implement this idea.

- “Intrinsic Local Distances: a Mixed Solution to Weyl’s Tile Argument” *Synthese* (2020).

Weyl’s tile argument is a simple and influential argument against the view that our space is composed of extended indivisible “atoms.” I advance a novel response to this argument by appealing to a new account of distance for atomistic space, and argue that this response is better than the current proposals.

- “Infinitesimal Gunk,” *Journal of Philosophical Logic* (2020).

A natural development of the gunky view, the view that there are no indivisible regions of space, violates standard measure-theoretic principles. I advance *Infinitesimal Gunk* as an alternative gunky view with a hyperreal-valued measure theory and argue that this view has distinctive advantages over the other proposals.

- “Do Simple Infinitesimal Parts Solve Zeno’s Paradox of Measure?” *Synthese* (2019).

It is sometimes suggested that space is composed of infinitesimal-sized points. I develop this view into a rigorous infinitesimal theory of continua. The theory has an attractive measure theory, but it also suffers from various problems, which leave it with no clear advantage over its familiar alternatives.

## New Submissions

- “In Favor of Spacetime Dynamicism”

I argue for dynamicism, according to which dynamic laws are more fundamental than spacetime geometry. I also defend the view from Norton’s (2008) objection by appealing to a new technical implementation of dynamicism.

- “Smooth Infinitesimals in the Metaphysical Foundation of Spacetime Theories”

I give a classically consistent interpretation of Smooth Infinitesimal Analysis (SIA) which is formulated in intuitionistic logic and is commonly considered to lack a classical interpretation. I advance the resulting theory as a novel approach to spacetime, which has infinitesimal regions playing the role of tangent space.

## Presentations

- “A defense of spacetime dynamicism” Koc Colloquium Talk 2021.
- “Intrinsic Local Distances: A Mixed Solution to Weyl’s Tile Argument,” American Philosophical Association Pacific Division, Online, 2021.
- “Toward A Metaphysics of Nilpotent Region,” Society for the Metaphysics of Science Annual Conference, University of Toronto, November 2019.
- “Intrinsic Local Distances: A Mixed Solution to Weyl’s Tile Argument,” Philosophy of Logic, Mathematics, and Physics Graduate Conference, University of Western Ontario, June 2019.
- “Toward A Metaphysics of Nilpotent Region,” University of Southern California, May 2019.
- “Toward A Metaphysics of Nilpotent Region,” Eileen O’Neil Workshop for Women in Philosophy, Massachusetts, March 2019.
- “A Local Solution to Weyl’s Tile Argument,” Metaphysical Mayhem, Rutgers University, 2018.
- “Rescuing Justice from Cohen,” Wisconsin Philosophical Association, Marquette University, 2013.

## Services

- Commentary in APA eastern division 2021 (Symposium); Society for the Metaphysics of Science Annual Conference, Toronto 2019.
- Referee for Philosophical Studies, Philosophical Quarterly, European Journal for Philosophy of Science, Chinese Philosophical Review, Inquiry. 2020-2021.
- Colloquium organizer, Koc University 2020-21.

## **Fellowships and Grants**

- Summer Dissertation Fellowship, 2018.
- Travel Grant for Graduate Students, 2017, 2018, 2019.
- Puryear Fellowship for First Year Students, 2014.
- Visiting Student Scholarship (funded by the Templeton Foundation), 2011-2012.
- Fudan Graduate Student Scholarship, 2009, 2010, 2011.
- The Dean's Award in the School of Philosophy, Fudan, 2009.
- Fudan Undergraduate Distinguished Scholarship, 2007, 2008, 2009.
- Hong Kong People Distinguished Fellowship, 2006.

## **Teaching**

### **Koç University**

- Metaphysics of Science (Graduate/Undergraduate; Spring 2021)
- Space and Time (Humanity Core Course; Spring 2021)
- Ontology (Philosophy Elective; Fall 2020)

### **Umass, Amherst**

- Philosophy of Science (Spring 2020)
- Medical Ethics (Fall 2017, Spring 2018, Fall 2018, Spring 2019, Fall 2019)

### **Teaching Assistant**

- Intro to Philosophy (Hilary Kornblith, Spring 2017; Ned Markosian, Fall 2016)
- Intro to Ethics (Chris Meacham, Spring 2016)
- Intro to Philosophy (Alejandro Perez Carballo, Fall 2015)
- Intro to Logic (Richard Tierney, Spring 2013; Joshua Spencer, Fall 2012)

## References

- Phillip Bricker  
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