

PROMOTION RECOMMENDATION
The University of Michigan
College of Literature, Science, and the Arts

David J. Baker, assistant professor of philosophy, College of Literature, Science, and the Arts, is recommended for promotion to associate professor of philosophy, with tenure, College of Literature, Science, and the Arts.

Academic Degrees:

Ph.D.	2008	Princeton University
B.S.	2003	University of Michigan

Professional Record:

2008 – present Assistant Professor, Department of Philosophy, University of Michigan

Summary of Evaluation:

Teaching – Professor Baker has proven to be a versatile teacher who has created successful courses that engage student interest. He has taught a wide range of courses outside his area of primary expertise, the philosophy of physics, including a justly popular course entitled “Philosophy and Science Fiction,” which he developed. He has consistently shown a preference in introductory instruction for developing philosophical ideas in more informal ways; for example, through extensive use of class discussion, shared reading of fiction, and tying logic to reasoning in natural language. Attentive to feedback from students and pedagogical experts alike, Professor Baker has developed into a strong undergraduate teacher, with increasingly improved ratings from student evaluations. He has also made important contributions to the graduate curriculum and to graduate advising.

Research – Professor Baker focuses on the foundations of contemporary mathematical physics, particularly quantum field theory, but with an attention to implications for metaphysics. He has an aptitude for presenting technically demanding material in a way that makes it relevant to the broader concerns of non-specialist. His treatments of the ontology and interpretation of quantum field theory are shaping the discipline. He also has a rare gift for seeing and exploiting links between questions and issues that arise in physical theories and questions and issues that are of concern to contemporary metaphysics. These two virtues account for much of what makes Professor Baker’s work distinctive and widely admired. He has eight papers in print and two in press, with two others under submission. All are in or have been submitted to the top journals in his field.

Recent and Significant Publications:

- “The conventionality of parastatistics,” with H. Halvorson and N. Swanson, *The British Journal for the Philosophy of Science*, forthcoming.
- “Identity, superselection theory and the statistical properties of quantum fields,” *Philosophy of Science*, 80, 2013, pp. 262-285.
- “‘The experience of left and right’ meets the physics of left and right,” *Nous*, 46, 2012, pp. 483-498.
- “Broken symmetry and spacetime,” *Philosophy of Science*, 78, 2011, pp. 128-148.

Service – Himself a Michigan graduate, Professor Baker excels at service that reaches out to undergraduate students. A long-standing member of the undergraduate studies committee, he is ready to helm that committee. He is the faculty advisor for a variety of undergraduate groups, and a mainstay as a graduation marshal. He is also an LSA representative to the University Senate, and a veteran of important departmental committees including faculty search, graduate admissions, and GSI evaluation.

External Reviewers:

Reviewer (A)

“...I take David Baker to be one of the best philosophers [of his cohort] of physics. He is very smart, and philosophically sophisticated. ...he clearly has a sufficient quantity of published material in appropriate venues for tenure at [my institution]... For my part, on the balance of the evidence, I would vote in favor of promotion to tenure.”

Reviewer (B)

“...[Baker 2009] is significant because it fills a conspicuous gap in the literature. ...[Baker and Halvorson 2010] is also one of the most significant recent articles in the field. ...[Baker, et al., forthcoming] should probably also be considered one of the most significant recent papers in the field.”

Reviewer (C)

“...I know of no philosopher of physics who majorizes [sic] Dave in all respects. ... The philosophy department at Michigan is rightly considered to be one of the two or three best places in the world to study philosophy of physics. ...unlike Michigan, some of the strong places in philosophy of physics lack strength in ‘core’ philosophical areas. ... So, Michigan really has something special and unique right now – due largely to some great hiring and promotion decisions that have been made in recent years. In my opinion, promoting Dave Baker to associate professor would be yet another of these great decisions.”

Reviewer (D)

“His prize-winning paper ‘Against Field Interpretations of Quantum Field Theory’ makes a seminal contribution to the quest to fathom the ontology of our currently fundamental physical theories. By showing how powerful objections to a particle ontology may be adapted to provide equally convincing reasons to reject a fundamental ontology of fields, Baker’s paper presents physicists as well as philosophers with a deep problem—to say what in the world our best physical theories are about. As one of the philosophers who had been wrestling with this problem for many years, reading David’s paper was one important stimulus in changing the direction of my own research.”

Reviewer (E)

“In brief, my opinion is that Baker follows squarely in the long-standing tradition of excellence in philosophy of physics at your department, and would be tenurable at any department in the country. ... There are very few people whose work almost always makes me feel that I learned something interesting that will affect my thinking, but Baker is one of them.”

Reviewer (F)

"Baker's is one of the clearest cases I have seen of someone who deserves to be promoted and granted tenure. His work is exciting, important, and careful, and uniformly of very high quality. While my own department does not teach philosophy of physics, were we making an associate-professor-equivalent hire in philosophy of physics there is nobody in the world I would rather for such a position than David Baker."

Reviewer (G)

"...he is both an excellent metaphysician and an excellent philosopher of physics. In particular, his work on physical ontology and spacetime symmetries makes important contributions to the intersection of metaphysics and philosophy of physics in a way that I, as a metaphysician, find engaging, metaphysically sophisticated, and deeply insightful. ... I strongly support Baker's case for tenure."

Reviewer (H)

"...Baker has mastered a difficult area of mathematical physics and shown how a variety of philosophical debates are transformed within that context. This is clearly a case where he can be judged on existing achievements and not mere potential. I expect that he will continue to pursue this line of work at a comparably high level in the future, and that he will be one of the main contributors in philosophy of QFT [Quantum Field Theory]. I recommend that the department grant him tenure based on his research achievements."

Summary of Recommendation:

Professor Baker is a leader in his field, a versatile teacher, and has served on important committees. The Executive Committee of the College of Literature, Science, and the Arts and I recommend that Assistant Professor David J. Baker be promoted to the rank of associate professor of philosophy, with tenure, College of Literature, Science, and the Arts.



Susan A. Gelman
Heinz Werner Distinguished University Professor,
Professor of Psychology and Interim Dean,
College of Literature, Science, and the Arts

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