

PHYSICS COLLOQUIUM

Patrick Connolly

Professor of Philosophy, Lehigh University

“Early Newtonian Approaches to Gravitational Attraction”



Isaac Newton's *Principia* argued that gravitational forces were responsible for a number of important astronomical and terrestrial phenomena. But Newton famously refused to speculate about the cause of gravitational attraction. This talk offers a guide to some of the discussions between early Newtonians about the metaphysical underpinnings of gravitational attraction. Physicists and philosophers working in Newton's wake developed a number of proposals to explain how gravitational forces might operate. The role played by various theological commitments in the explanations on offer will receive special attention. I will conclude with some reflections on methodology and the place of metaphysical explanation in scientific theory.

Patrick Connolly is an assistant professor of philosophy at Lehigh University and was previously an assistant professor at Iowa State University. He earned his PhD in philosophy from the University of North Carolina, Chapel Hill in 2013. His research focuses on issues at the intersection of philosophy, theology, and the natural sciences in the early modern period. He is particularly interested in the way that thinkers like John Locke and Isaac Newton conceived of causation and related concepts (law of nature, force, power, etc.). His work has appeared in a number of journals including *Studies in History and Philosophy of Science*, *Philosophical Studies*, and *History of Philosophy Quarterly*.

Thursday, November 30, 2017

4:10PM in Lewis Lab. 316

Refreshments at 3:45PM in LL. 317