University of Notre Dame Philosophy of Physics Workshop

April 20th-21st, 2016 400 Geddes Hall

Wednesday April 20th

12:00-1:00 Lunchtime brown bag talk: Bryan Roberts (LSE) Unreal observables 1:15-2:00 Jeremy Steeger Sheaves, generalized probability, and the *hierarchy of quantum contextuality* 2:00-2:45 Laura Wells Kapustin's rigidity theorem for quantum mechanics 3:00-3:45 Pablo Ruiz de Olano Intimate connections: symmetries and conservation laws in quantum versus classical mechanics 3:45-4:30 Jamee Elder Black hole complementarity and the information loss paradox 5:00-6:00 Elise Crull (CCNY) Loop quantum gravity and decoherence

Thursday April 21st

10:00-11:00 Don Howard Decoherence and complementarity 11:00-11:45 Martin Beers *How to teach special relativity* 12:00-1:00 Lunchtime brownbag talk: Nick Huggett (UIC) 'Emergent' spacetime in non-commutative geometry 1:15-2:00 Sebastián Murgueitio Ramirez Ontic versus epistemic quantum states, and the PBR theorem 2:00-2:45 Corey Dethier Quantities of centripetal force in Newton's Principia 2:45-3:30 Monica Solomon Newton's mathematical forces: the curious case of cycloid motion

Workshop co-organizers: Katherine Brading and Nic Teh

Thursday April 21st, 207 DeBartolo Hall 4:30-6:00 Cushing Prize Lecture: Eleanor Knox (KCL) Spacetime functionalism



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