Introduction

I. Quantum Entanglement and Nonlocality

1. Sandu Popescu, University of Bristol, “Nonlocality Beyond Quantum Mechanics”
2. Lorenza Viola, Dartmouth College and Howard Barnum, Los Alamos National Laboratory, “Entanglement and Subsystems, Entanglement Beyond Subsystems, and All That”
3. Lucien Hardy, Perimeter Institute, “Formalism Locality in Quantum Theory and Quantum Gravity”

II. Quantum Probability

4. Andrei Khrennikov, University of Växjö, Sweden, “Bell’s Inequality from the Contextual Probabilistic Viewpoint”
7. Leah Henderson, M.I.T., “Bayesian Updating and Information Gain in Quantum Measurements”

III. Quantum Information

8. Armond Duwell, University of Montana, “Schumacher Information and the Philosophy of Physics”
9. Wayne Myrvold, University of Western Ontario, “From Physics to Information Theory and Back”
10. Chris Timpson, Oxford University, “Information, Immaterialism, and Instrumentalism: Old and New in Quantum Information”

IV. Quantum Communication and Computing

12. Tai Wu, Harvard University, “Quantum Mechanics, Quantum Computing and Quantum Cryptography”