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Abstract for an Invited Paper for the TSF17 Meeting of the American Physical Society

Quantum Entanglement, Holography and the Geometry of Spacetime

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Holographic duality postulates the equivalence between a theory of quantum gravity and a non-gravitational quantum field theory in a different space. Recent progress in this area suggests a deep connection between quantum entanglement and the geometry of spacetime. In this talk I will give an overview of these ideas, describe some results and open questions.