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Entanglement and the second law IAN DURHAM, Saint Anselm College — The second law of thermodynamics is, in reality, a strong argument about the nature of probabilities. In essence, the same can be said of Bell's inequalities, of which thermodynamic variations have been found. The tantalizingly close nature of these two arguments has potentially profound implications for quantum theory and, in particular, practical quantum computing. This presentation explores this relationship and its potential implications.

Ian Durham Saint Anselm College

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