

# Quantum field theory from entanglement

*Tuesday, 7 February 2023 16:50 (25 minutes)*

Growing evidence suggests that vacuum entanglement entropy (EE) may provide a universal description of QFT (in general dimensions), alternative to correlation functions. In this talk I will review the set of known axioms satisfied by EE in QFT and some of its successes in the direction of uniquely characterising the different models. Then, I will argue that such set of axioms is at present incomplete by explicitly showing that certain models which satisfy all the axioms do not correspond to any actual QFT.

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