Quantum Scrambling: Interim Report

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Abstract

ABSTRACT GOES HERE

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1 Intro

Entanglement has been the subject of intense research since it's discovery in 1935. It is a central property of quantum systems and gives quantum compuatation it's *quantum supremacy*. It is natural then, to further study this phenemona and it's dynamics, specifically the entropy of entanglement.

Entanglement entropy has seen considerable interest in the last decade, [1]

2 Theory

To start, it is useful to introduce the generic setup of quantum scrambling and some quantum information basics.

3 Approaches

References

[1] Stephen H. Shenker and Douglas Stanford. Black holes and the butterfly effect. *Journal of High Energy Physics*, 2014.