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Gravity and Entanglement

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Abstract

In the realm of microscience, this is a minimalist article exploring the relation between gravity and entanglement in a heuristic fashion.

keywords: entanglement harvesting, Planck scale, quantum gravity

Introduction

This is an open science experiment. **Citizen** and **Peer Review** are *very welcome*. Please contact the author.

There is a mathematical relation between gravity and entanglement

1. **Gravity** curves **spacetime** [1–3].

2. **Space** is **entangled**, and it tears apart when entanglement is broken [4].

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3. Due to (1) and (2), one can conclude there is a *mathematical relation* between **gravity** and **entanglement**.

4. Theoretical research is being done on **entanglement harvesting** [5–9], which means the *extraction* of **entanglement** from the **quantum vacuum** [10].

5. (4) reinforces (3).

Final Remarks

Perhaps a pure mathematical approach can furnish the *relations* we are seeking in order to *connect* **gravity** with **entanglement**.

Open Invitation

Please *review* this article, *add* content, and *join* the **Open Physics Collaboration**.

Ethical conduct of research

This original work was pre-registered under the OSF Preprints [11], please cite it accordingly [12]. This will ensure that researches are conducted with integrity and intellectual honesty at all times and by all means.

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