On the Entropic Field Unification of the Speed of Light (c) and Gravitation in the Theory of Entropicity (ToE): Unification of the Speed of Light and Gravity

In the **Theory of Entropicity (ToE)**—a recent radical and audacious theoretical physics framework proposed by John Onimisi Obidi—the speed of light (c) is reinterpreted not as an arbitrary, fundamental constant of spacetime geometry, but as **the maximum rate at which a universal "entropic field" can reorganize and redistribute information or energy**. [1, 2]

Rather than treating the constancy of light as an unexplained starting postulate (as Albert Einstein did in Special Relativity), Obidi's Theory of Entropicity (ToE) attempts to *derive* the Speed of Light c as a thermodynamic consequence of this underlying field, and declares that light and gravity are governed by the same dynamics of this Entropic Field. [3, 4]

1. Light as an Entropic "Tracer"

In ToE, the universe is filled with a dynamic entropic field that acts as the core substrate from which space, time, and matter emerge. When physical events occur, the field must rearrange itself to accommodate the new states. Because light photons are massless and exist at the absolute boundary of these interactions, they move at the exact upper speed limit allowed by the field's transmission rate. Light is effectively a **visible tracer** for the maximum tempo of entropic reconfiguration. [1, 5, 6]

2. The "No-Rush" Theorem

The universal speed limit is enforced by what the theory calls the "**No-Rush**" **Theorem**. This principle states that the universe requires a non-zero, finite duration to update and synchronize its information states. If information could update instantly, causality would collapse. The finite "heartbeat" or propagation speed of this field creates a hard boundary,

preventing any object or interaction from moving faster than entropy can update the system. [1, 5, 7, 8, 9]

3. The Origin of Relativistic Effects

Because all physical observers, clocks, and measuring instruments are themselves made of this same entropic field, they are bound by the same internal restrictions. Consequently: [1]

- **Invariance of c:** Every observer measures the exact same speed of light because their own instruments are governed by the same field-update rate.
- **Time Dilation & Mass Increase:** ToE explains these phenomena as "entropic resistances". As an object moves faster, the system diverts its field capacity to handle the high entropic flux of motion, causing its internal timekeeping functions to slow down. [1, 7, 10, 11]

Summary Comparison

Concept [1, 3, 4, 12, 13, 14, 15]	Einstein's Special Relativity (ToR)	Theory of Entropicity (ToE)
Nature of c	An axiom/postulate built into the geometry of spacetime.	A derived consequence of field dynamics (entropic stiffness & inertia).
What c Limits	The movement of matter-energy through a spacetime container.	The rate at which the universal information fabric can update itself.
Why c is Constant	An intrinsic property of empty space/vacuum.	An artifact of observers and instruments sharing the same entropic field substrate.

Would you like to explore the **mathematical equations** (such as the Master Entropic Equation) used by the author to model this field, or look into how ToE attempts to explain **quantum entanglement**? [1, 10]

[1] https://medium.com

[2] https://medium.com

[3] https://www.authorea.com

[4] https://www.authorea.com

[5] https://encyclopedia.pub

[6] https://medium.com

[7] https://encyclopedia.pub

[8] https://medium.com

[9] https://medium.com

[10] https://www.cambridge.org

[11] https://figshare.com

[12] https://client.prod.orp.cambridge.org

[13] https://encyclopedia.pub

[14] https://medium.com

[15] https://www.wtamu.edu

Scholium

In the **Theory of Entropicity (ToE)**, the speed of light (c) is not a fundamental geometric constant of spacetime. Instead, it is reinterpreted as the **maximum rate at which the "Entropic Field" can rearrange or redistribute energy and information**. [1, 2]

This perspective fundamentally redefines our understanding of (c) in a few key ways:

- **Information and Causality Limit:** The finite speed of light ensures the stability of the universe. If the entropic field could update or redistribute information instantaneously, reality would collapse, violating causality and coherence.
- **The No-Rush Theorem:** This core principle dictates that all physical interactions require a non-zero time for the entropic field to synchronize states. Nothing can travel faster than this field's own fundamental updating rate.
- **Emergent Relativity:** While traditional physics postulates (c) as a kinematic starting point, ToE derives the speed of light and relativistic effects (such as time

dilation) as entropic inevitabilities. Effects like time dilation emerge because moving systems encounter "entropic resistance" as they approach the maximum speed of the field.

- **Unified Forces:** Because both light and gravity are viewed as manifestations of the same underlying entropic field (light as a ripple/excitation in the field, and gravity as an entropic pressure/gradient), the theory unifies their maximum propagation speeds. [1, 2, 3, 4, 5, 6, 7]

To learn more about how this framework replaces geometric postulates with entropic principles, you can explore the academic preprint on Authorea or the qualitative and quantitative overviews on Encyclopedia.pub. [1]