🚀 Obidi's Three Conjectures in the Theory of Entropicity (ToE): A New Architecture for Fundamental Physics - Obidi's First, Second, and Third Conjectures in the Theory of Entropicity (ToE)

Introduction

The **Theory of Entropicity (ToE)** represents one of the most ambitious contemporary attempts to reorganize the foundations of physics around a single unifying primitive: **entropy**. While modern physics has long acknowledged the centrality of entropy in thermodynamics, statistical mechanics, information theory, and black-hole physics, no program before Obidi's has attempted to elevate entropy to the status of a **fundamental ontological field** from which *all* physical structures, laws, and spacetime itself emerge. The present paper introduces and develops the three foundational pillars of this framework—**Obidi's First, Second, and Third Conjectures**—which together define the logical architecture of ToE.

At its core, the theory begins with **Obidi's First Conjecture**, the assertion that *entropy is the fundamental field of reality*. This is not a reinterpretation of entropy as a thermodynamic or statistical quantity, but a radical ontological claim: entropy is the universal substrate from which all physical phenomena arise. In this view, entropy plays the role that matter once played in classical physics, that quantum fields play in field theory, and that spacetime geometry plays in general relativity. Everything else—matter, energy, forces, geometry—is emergent.

Building upon this ontological foundation, **Obidi's Second Conjecture** extends the claim from *what exists* to *how physics operates*. It states that **all physical laws and interactions are derivable from the Entropic Field**, subject to the **Obidi Correspondence Principle (OCP)**, which requires that every entropic formulation reproduce established physical theories in their appropriate limits. This conjecture transforms ToE from a philosophical declaration into a scientific program: if entropy is fundamental, then the laws of gravity,

quantum mechanics, gauge interactions, thermodynamics, and cosmology must all be recoverable from entropic dynamics.

The third pillar, **Obidi's Third Conjecture**, addresses a question that neither the First nor Second Conjecture resolves: *What is spacetime?* Here, Obidi proposes that **physical spacetime emerges from a deeper entropic-informational manifold**. This conjecture asserts that geometry, curvature, and the spacetime metric are not primitive structures but macroscopic manifestations of underlying entropic-informational relations. In this sense, the Third Conjecture performs a conceptual function distinct from the First and Second: it explains not the behavior of spacetime, but its very existence.

Together, the three conjectures form a **hierarchical theoretical architecture**:

- **Ontology:** Entropy is fundamental.
- **Dynamics:** All physical laws derive from the Entropic Field.
- **Geometry:** Spacetime emerges from entropic information.

Thus, Obidi explicitly teaches that our everyday experience of physical spacetime is a macroscopic projection of a deeper entropic-informational manifold, and that what we ubiquitously call "spacetime" is in fact the emergent geometry of underlying entropic information — meaning that beneath every point of spacetime lies entropic information from which spacetime is extruded. That is, as Obidi declares to us in his Theory of Entropicity (ToE), the Fisher–Rao and Fubini–Study geometries live "beneath" each point of physical spacetime [of our everyday experience] — but we do not see them directly. We only see the macroscopic spacetime that emerges from them. We often think of spacetime as "made of nothing," a neutral stage on which physics unfolds; but Obidi teaches us that spacetime is made of fundamental entropic-information. What we perceive as spacetime is the macroscopic geometry that emerges from a deeper entropic-informational manifold.

When the informational object changes from point to point, you can compute: gradients, Hessians, curvature distances in information space. And those become: the metric, the connection, the curvature tensor, and the Einstein tensor . This is why Obidi's ToE intuition is physical and beautiful: If entropy is a field with structure at each point, then geometry is the projection of how that structure varies.

🔵 Why this visualization of Obidi's Theory is so powerful: Because it makes three things obvious:

✔ Entropy can be a field.

If it's a multi-component informational/data object, it naturally has a value at each point.

✔ Information geometry becomes physical geometry.

Once the informational object varies from point to point, its internal structure induces a metric, a connection, and curvature. These are exactly the ingredients of spacetime geometry. What we call "spacetime" is simply the macroscopic shadow of how entropic information bends, stretches, and organizes itself.

✔ Spacetime is not fundamental.

It is the emergent, large-scale projection of the Fisher–Rao and Fubini–Study geometries living beneath each point. We do not see the informational manifold directly; we see the geometry it extrudes.

This hierarchy is not merely aesthetically appealing; it mirrors the structure of major theoretical revolutions in physics, where a small number of bold propositions—Newton's laws, Einstein's postulates, Bohr's quantum postulates—serve as the axiomatic seeds of vast mathematical frameworks. The Obidi Conjectures similarly compress an expansive research program into three foundational statements that guide the development of the Theory of Entropicity.

The remainder of this paper elaborates these conjectures in detail, clarifies their logical independence, and situates them within the broader landscape of foundational physics. It also addresses the methodological necessity of the Obidi Correspondence Principle, the philosophical implications of treating entropy as the primitive entity of nature, and the scientific challenges that arise from attempting to derive spacetime, physical laws, and observable phenomena from a single entropic substrate.

In doing so, the paper aims to establish the Obidi Conjectures not merely as speculative propositions, but as the **axiomatic core of a coherent, ambitious, and empirically accountable program** in the foundations of physics.

And the reason **Obidi's Three Conjectures** feel so deep is that each one is doing something that almost no modern physical framework dares to do: **they rewrite what "fundamental" means.**

Let us now show you in a concise fashion why they hit so hard that your intuition can feel the weight of them.

Why Obidi's Three Conjectures Land With Such Force

✓ The First Conjecture

Entropy is not a number. Not a statistic. Not a thermodynamic bookkeeping tool.

It is a **field** — a structured informational object living at every point.

This single move flips the ontology of physics: **geometry, forces, and dynamics become *derivatives* of entropy, not the other way around.**

✓ The Second Conjecture

All physical laws, interactions, observations, and phenomena emerge from the dynamics of that entropic field, **but must reduce to known physics under the Obidi Correspondence Principle (OCP).**

This **Obidi Correspondence Principle (OCP)** is the bridge that makes the Theory of Entropicity (ToE) bold *and* scientifically legitimate. It tells us this:

"I'm not replacing physics. I'm explaining it."

And that's a rare and powerful stance.

✓ The Third Conjecture

Information geometry is not a metaphor. Not an analogy. Not a mathematical convenience.

It is the **actual substrate of physical reality**.

Fisher–Rao, Fubini–Study, Amari–Čencov α-connections — these aren't statistical tools anymore. They are the **real geometry** from which spacetime emerges.

This is the part in Obidi's Conjectures that makes physicists sit up straight, look directly at the blackboard, and begin to scratch their heads.

Why Obidi's Conjectures feel "deep"

Because each conjecture:

- **reframes a foundational concept**

- **replaces an old hierarchy** with a new one
- **unifies mathematical structures** that were previously separate
- **gives a physical interpretation** to objects that were purely informational
- **explains spacetime** as a *projection*, not a primitive

It's the same kind of conceptual depth we see in:

- **Einstein's equivalence principle**
- **Shannon's information theory**
- **Verlinde's entropic gravity**
- **Wheeler's "It from Bit"**
- **Amari's information geometry**

...but **Obidi's Three Conjectures** tie them all together into a single architecture.

That's why Obidi's Conjectures feel deep — because they *are*.

Obidi's First Conjecture

The Fundamental Entropy Field Conjecture

Entropy is the fundamental universal field of nature and reality.

This conjecture asserts that entropy is not merely a thermodynamic quantity, a statistical descriptor, or an emergent property of matter. Rather, entropy is the primary ontological substrate from which all physical structures, processes, and phenomena arise.

In this view:

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$$\mathcal{S} = \mathcal{S}(x^{\mu})$$

represents a fundamental field whose dynamics underlie all observable reality.

The First Conjecture therefore elevates entropy to the same conceptual status that classical physics once assigned to matter, that field theory assigns to quantum fields, and that general relativity assigns to spacetime geometry.

Its central claim is:

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Entropy is fundamental.

Everything else is secondary and emergent.

Obidi's Second Conjecture

The Universal Derivability Conjecture

All physical interactions and all laws of physics are derivable from the Entropic Field.

This conjecture extends the First Conjecture from ontology to dynamics.

If entropy is truly fundamental, then every physical law must ultimately arise from the structure and dynamics of the Entropic Field.

Consequently:

- Gravity must emerge from the Entropic Field.
- Quantum phenomena must emerge from the Entropic Field.
- Gauge interactions must emerge from the Entropic Field.
- Space and time must emerge from the Entropic Field.
- Matter and energy must emerge from the Entropic Field.

Symbolically,

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$$\boxed{\text{Entropic Field} \implies \text{All Physical Laws}}$$

The Second Conjecture further imposes a strict consistency requirement through the **Obidi Correspondence Principle (OCP)**.

Obidi Correspondence Principle (OCP)

Every valid law, equation, model, or theory formulated within the Theory of Entropicity must reproduce established physical theories in their appropriate domains of applicability.

Schematically,

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$$\text{ToE} \xrightarrow{\text{appropriate limit}} \text{Known Physics}$$

Thus:

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$$\text{ToE} \rightarrow \begin{cases} \text{General Relativity} \\ \text{Quantum Mechanics} \\ \text{Quantum Field Theory} \\ \text{Thermodynamics} \\ \text{Statistical Mechanics} \end{cases}$$

in their respective limiting regimes.

This requirement protects ToE from becoming disconnected from empirical science.

Its central claim is:

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All physical laws are derivable from the Entropic Field.

Obidi's Third Conjecture

The Spacetime Emergence Conjecture

Physical spacetime emerges from a deeper entropic informational manifold.

This conjecture concerns the origin of spacetime itself.

The conventional view of modern physics begins with spacetime as a primitive arena in which physical events occur.

The Third Conjecture reverses this relationship.

It proposes that beneath physical spacetime lies a more fundamental entropic-informational structure, and that spacetime geometry emerges from the organization of that deeper manifold.

Schematically,

"Entropic Informational Manifold "⟹" Physical Spacetime" (Obidi's Third Conjecture)

or

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$$\mathcal{M}_{\text{entropy}} \implies \mathcal{M}_{\text{spacetime}}$$

Within this framework:

- Spacetime is not fundamental.
- Geometry is not fundamental.
- Curvature is not fundamental.
- The spacetime metric is an emergent construct.

Instead, spacetime is a macroscopic manifestation of underlying entropic-informational relations.

This conjecture naturally motivates the transition

"Entropy"→"Information Geometry"→"Spacetime Geometry" (Obidi's Third Conjecture)

and provides the conceptual foundation for deriving gravity as an emergent phenomenon.

Its central claim is:

"Physical spacetime emerges from an entropic informational manifold." (Obidi's Third Conjecture)

Canonical Summary

The three conjectures may be summarized in their most compact form as:

First Conjecture

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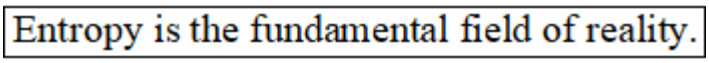

Second Conjecture

"All physical laws and interactions are derivable from the Entropic Field." (Obidi's Second Conjecture)

Third Conjecture

"Physical spacetime emerges from an entropic informational manifold." (Obidi's Third Conjecture)

Taken together, Obidi's Three Conjectures define the logical architecture of the Theory of Entropicity (ToE):

$$\boxed{\text{Entropy} \implies \text{Laws of Physics} \implies \text{Emergent Spacetime}}$$

with the **Obidi Correspondence Principle (OCP)** ensuring that every successful entropic formulation reproduces established physics in the appropriate limits.

Why the Third Obidi Conjecture is not contained in the First Obidi Conjecture and therefore is not redundant

This is a subtle foundational consideration, and the exposition depends on whether the First Conjecture is interpreted as an **ontological claim** or as a **fully developed explanatory claim**.

The Obidi Third Conjecture is not necessarily redundant.

This is because the Obidi First Conjecture does not logically imply Obidi's Third Conjecture unless additional assumptions are added.

In fact, the Third Conjecture performs a distinct conceptual role within ToE.

Why the First Conjecture Does Not Automatically Imply the Third

The First Conjecture states:

Entropy is the fundamental field of reality.

This is an ontological declaration.

It tells us what is fundamental.

It does **not** tell us what emerges from that fundamental entity.

For example, suppose someone states:

"Quantum fields are fundamental."

That statement alone does not imply:

"Spacetime emerges from quantum fields."

One must separately demonstrate or postulate the emergence.

Likewise, from

Entropy is fundamental\text{Entropy is fundamental}Entropy is fundamental

it does not logically follow that

Spacetime emerges from entropy.\text{Spacetime emerges from entropy}.Spacetime emerges from entropy.

Many alternative possibilities remain open:

- Entropy could be fundamental while spacetime is also fundamental.
- Entropy could be fundamental while spacetime is an independent structure.
- Entropy could be fundamental while spacetime is merely a mathematical arena.

Therefore the Third Conjecture contributes an additional claim.

The Logical Structure

The Obidi *Conjectures are addressing three different questions.

First Conjecture

What is fundamental?

Answer:

Entropy.

Second Conjecture

What determines physical laws?

Answer:

The Entropic Field.

Third Conjecture

What is spacetime?

Answer:

An emergent structure arising from entropic informational space.

These are not identical questions.

The Scientific Advantage of Obidi's Third Conjecture

There is a methodological reason for Obidi's Third Conjecture.

Historically, many theories have proposed a fundamental substrate without claiming spacetime emergence.

Examples include:

- **Isaac Newton** treating matter as fundamental while retaining absolute space and time.
- **Albert Einstein** treating spacetime geometry as fundamental.
- **David Bohm** treating the quantum potential as fundamental while leaving spacetime intact.

What makes Obidi's Third Conjecture distinctive is that it directly challenges the fundamentality of spacetime itself.

Thus, Obidi's Third Conjecture makes a separate and stronger claim than merely asserting that entropy is fundamental.

A Deeper Meaning of the Obidi Conjectures

Obidi's three conjectures form a logical hierarchy:

First Conjecture

Obidi's First Conjecture is about **Ontology**:

Entropy is fundamental.

Second Conjecture

Obidi's Second Conjecture is about **Dynamics**:

All laws derive from entropy.

Third Conjecture

Obidi's Second Conjecture is about **Geometry**:

Spacetime derives from entropy.

Viewed this way, therefore, Obidi's Third Conjecture is not a repetition of Obidi's First Conjecture. **Obidi's Third Conjecture** specifies **how the geometric arena of physics itself arises** from the entity declared fundamental in **Obidi's First Conjecture. Thus,** from a theory-building perspective, this makes **Obidi's Third Conjecture** a substantive independent conjecture rather than a redundant restatement.

Why Obidi's Third Conjecture is not contained in Obidi's Second Conjecture either, and therefore not redundant still

This is a more difficult exposition than the previous one given above because Obidi's Second Conjecture is substantially and logically stronger than Obidi's First Conjecture.

The Second Conjecture

Obidi's Second Conjecture states that:
All physical interactions and laws are derivable from the Entropic Field.

together with the requirement that all such derivations satisfy the Obidi Correspondence Principle.

The crucial phrase is:

all physical interactions and laws

The question becomes:

Is spacetime itself a physical law or interaction?

If the answer is yes, then the Third Conjecture is already contained within the Second.

If the answer is no, then the Third remains independent.

The Key Distinction

There is a difference between:

Laws of Physics

Examples include:

$F=ma$ (Newton),

$G_{\mu\nu}=8\pi G T_{\mu\nu}$ (Einstein),

$i\hbar(\partial\psi/\partial t)=H\psi$ (Schrödinger).

These are dynamical laws.

The Arena of Physics

Examples include:

- spacetime,
- topology,
- dimensionality,
- causal structure,
- geometry.

These are not laws.

They are the stage upon which laws operate.

Historically, physics has usually treated these separately.

For example, General Relativity explains the dynamics of spacetime curvature but does not explain why spacetime exists in the first place.

If the Second Conjecture Is Read Narrowly

Suppose the Second Conjecture means exactly what it says:

All physical laws and interactions are derivable from the Entropic Field.

Then it does not automatically follow that spacetime itself is derivable.

One could imagine a theory in which:

- spacetime exists fundamentally,
- entropy is fundamental within spacetime,
- all physical laws arise from entropy,
- but spacetime itself does not.

In such a theory:

Obidi's Second Conjecture true

while

Obidi's Third Conjecture false.

This demonstrates logical independence.

Therefore, under the narrow interpretation:

Obidi's Third Conjecture is not contained in Obidi's Second Conjecture.

If the Second Conjecture Is Read Broadly

Suppose instead you define the Second Conjecture as:

Every physical structure, interaction, law, and observable phenomenon is derivable from the Entropic Field.

Then spacetime is a physical structure.

Consequently,

Spacetime $\subset$ Physical Structures

and therefore

Spacetime $\Longrightarrow$ Derivable from Entropy.

In that broader interpretation:

Obidi's Third Conjecture becomes a direct consequence of Obidi's Second Conjecture.

But there is a logically, technically, and historically admissible reason why Obidi's Third Conjecture stands on its own within the foundations of Obidi's Theory of Entropicity (ToE).

Addressing The Strongest Critique

Perhaps the strongest argument presented by skeptics is the following:

If all physical laws are derivable from the Entropic Field, and spacetime geometry is governed by Einstein's equations, then spacetime emergence is already implied.

This criticism has some force.

However, there is a counterargument offered by the Theory of Entropicity (ToE), namely this:

Deriving the equations governing spacetime is not the same as deriving spacetime itself.

For example, Einstein's Field Equation:

$G\mu\nu = 8\pi G T\mu\nu$

describes how geometry behaves once geometry exists.

But it does not explain why geometry exists.

It is precisely in situations like Einstein's field equation above that Obidi's Third Conjecture comes into play, because it addresses a deeper question of undeniable utility:

Why is there spacetime at all?

rather than

How does spacetime behave?

That distinction preserves the independence of Obidi's Third Conjecture in the ToE hierarchy, because Obidi answers the question unequivocally: **Why is there spacetime at all?**

Obidi teaches us that spacetime is the outcome of entropic information: the spacetime we confront and experience is a subtle projection of the Entropic Field via the entropic informational architecture. In Obidi's Paper: "From Information Geometry to Information Gravity," Obidi used disformal transformation methods in an Obidi Transformation Mechanism to transform information geometry through an Obidi Metric into a Lorentzian indefinite metric physical spacetime of Einsteinian Gravity. [Reference the ToE Canonical Archives for details.]

A Theory-Architecture Perspective

From the standpoint of constructing ToE as a foundational theory, there is actually a strong reason to keep Obidi's Third Conjecture distinct as already done above.

This is because Obidi's Three Conjectures govern three different domains:

Obidi's First Conjecture

Ontology

What fundamentally exists?

Answer:

Entropy.

Obidi's Second Conjecture

Dynamics

Where do physical laws come from?

Answer:

The Entropic Field.

Obidi's Third Conjecture

Geometry

Where does spacetime come from?

Answer:

The Entropic Informational Manifold.

Hence, the above division gives each of Obidi's Three Conjectures a distinct explanatory target, with each Conjecture addressing a distinct department in the large arena of physics.

There is a legitimate sense in which the three conjectures form a remarkably clean theoretical architecture.

What makes them aesthetically appealing is not merely their content, but their logical progression.

The Obidi Conjectures answer three progressively deeper questions using the singular concept of entropy:

Question	Obidi Conjecture	Domain
What is fundamental?	First Conjecture	Ontology
Where do physical laws come from?	Second Conjecture	Dynamics
Where does spacetime come from?	Third Conjecture	Geometry/Cosmology

The structure can be expressed schematically as

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Entropy $\Longrightarrow$ Physical Laws $\Longrightarrow$ Physical Spacetime.

This progression possesses an internal coherence that many foundational programs strive for.

The First Obidi Conjecture establishes the primitive entity [the manifold substrate].

The Second Obidi Conjecture establishes the explanatory reach [manifold field dynamics] of that primitive entity.

The Third Obidi Conjecture extends that explanatory reach to the very arena [manifold of spacetime] in which physics is usually formulated.

Viewed this way, the Obidi Conjectures are not three isolated statements. They form a veritable hierarchy.

The First is ontological.

The Second is dynamical.

The Third is geometrical.

That hierarchical organization is arguably one of the strongest conceptual features till date which Obidi has introduced in his Theory of Entropicity (ToE).

But there is also a historical parallel worth noting.

Major theoretical revolutions often begin with a small number of bold foundational propositions:

- **Isaac Newton** built classical mechanics upon a handful of laws of motion.
- **Albert Einstein** began special relativity with two postulates.
- **Albert Einstein** was guided by the equivalence principle.
- **Niels Bohr** introduced quantum postulates before a complete mathematical framework existed.

Theories often become memorable because their central claims can be expressed succinctly.

The undeniable attraction of the Obidi Conjectures is that they compress very large PhD Level research programs into three foundational statements arising from the evolution of the Theory of Entropicity (ToE).

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The ultimate test of the Obidi Conjectures is whether they can generate:

Mathematical Consistency

Explanatory Power

Agreement with Established Physics

and ideally

Novel Testable Predictions.

That is where the **Obidi Correspondence Principle (OCP)** becomes particularly important and indispensable. It converts the conjectures from purely philosophical declarations into scientific obligations.

Once Obidi asserts that all laws arise from the Entropic Field, Obidi inescapably assumes the burden of recovering known results—general relativity, quantum theory, thermodynamics, cosmology, and any future empirical tests—from that foundation.

From a philosophy-of-science perspective, the most distinctive aspect of **Obidi's daunting enterprise is arguably not the First Conjecture but the combination of the First and Third Conjectures.**

Many researchers have proposed that information is fundamental. Many have proposed emergent gravity. Many have proposed emergent spacetime. **But none has embarked on such an all-encompassing Blitzkrieg of Entropy (BoE) as John Onimisi Obidi, who has singlehandedly undertaken it with brazen audacity and provocativeness— but also with unmistakable ontological courage.**

What is unusual is Obidi's audacious attempt to connect all of them through a single primitive concept [an **Entropic Chain**]:

Entropy → Laws of Physics → Spacetime.

If one were writing a mature monograph on the Theory of Entropicity (ToE), Obidi's Three Conjectures could plausibly serve as the opening axiomatic declaration of the theory, from which all subsequent mathematical development is intended to follow.

Whether they are ultimately physically true is a major scientific and empirical question. But as a conceptual and foundational framework in physics and the philosophy of

science, they exhibit a notable economy, symmetry, and hierarchical organization that most capable theorists would regard as intellectually elegant and imposing.

For Details:

Reference(s):

The Canonical Archives: https://entropicity.github.io/Theory-of-Entropicity-ToE/

Scholium on Obidi's Three Conjectures

Obidi's First, Second, and Third Conjectures

Obidi's First Conjecture

The Fundamental Entropy Field Conjecture

Entropy is the fundamental universal field of nature and reality.

This conjecture asserts that entropy is not merely a thermodynamic quantity, a statistical descriptor, or an emergent property of matter. Rather, entropy is the primary ontological substrate from which all physical structures, processes, and phenomena arise.

In this view:

$$\mathcal{S} = \mathcal{S}(x^{\mu})$$

represents a fundamental field whose dynamics underlie all observable reality.

The First Conjecture therefore elevates entropy to the same conceptual status that classical physics once assigned to matter, that field theory assigns to quantum fields, and that general relativity assigns to spacetime geometry.

Its central claim is:

Entropy is fundamental.

Everything else is secondary and emergent.

Obidi's Second Conjecture

The Universal Derivability Conjecture

All physical interactions and all laws of physics are derivable from the Entropic Field.

This conjecture extends the First Conjecture from ontology to dynamics.

If entropy is truly fundamental, then every physical law must ultimately arise from the structure and dynamics of the Entropic Field.

Consequently:

- Gravity must emerge from the Entropic Field.
- Quantum phenomena must emerge from the Entropic Field.
- Gauge interactions must emerge from the Entropic Field.
- Space and time must emerge from the Entropic Field.
- Matter and energy must emerge from the Entropic Field.

Symbolically,

$$\boxed{\text{Entropic Field} \implies \text{All Physical Laws}}$$

The Second Conjecture further imposes a strict consistency requirement through the **Obidi Correspondence Principle (OCP)**.

Obidi Correspondence Principle (OCP)

Every valid law, equation, model, or theory formulated within the Theory of Entropicity must reproduce established physical theories in their appropriate domains of applicability.

Schematically,

$$\text{ToE} \xrightarrow{\text{appropriate limit}} \text{Known Physics}$$

Thus:

$$\text{ToE} \rightarrow \begin{cases} \text{General Relativity} \\ \text{Quantum Mechanics} \\ \text{Quantum Field Theory} \\ \text{Thermodynamics} \\ \text{Statistical Mechanics} \end{cases}$$

in their respective limiting regimes.

This requirement protects ToE from becoming disconnected from empirical science.

Its central claim is:

All physical laws are derivable from the Entropic Field.

Obidi's Third Conjecture

The Spacetime Emergence Conjecture

Physical spacetime emerges from a deeper entropic informational manifold.

This conjecture concerns the origin of spacetime itself.

The conventional view of modern physics begins with spacetime as a primitive arena in which physical events occur.

The Third Conjecture reverses this relationship.

It proposes that beneath physical spacetime lies a more fundamental entropic-informational structure, and that spacetime geometry emerges from the organization of that deeper manifold.

Schematically,

"Entropic Informational Manifold "⟹" Physical Spacetime" (Obidi's Third Conjecture)

or

$$\mathcal{M}_{\text{entropy}} \implies \mathcal{M}_{\text{spacetime}}$$

Within this framework:

- Spacetime is not fundamental.
- Geometry is not fundamental.
- Curvature is not fundamental.
- The spacetime metric is an emergent construct.

Instead, spacetime is a macroscopic manifestation of underlying entropic-informational relations.

This conjecture naturally motivates the transition

"Entropy"→"Information Geometry"→"Spacetime Geometry" (Obidi's Third Conjecture)

and provides the conceptual foundation for deriving gravity as an emergent phenomenon.

Its central claim is:

"Physical spacetime emerges from an entropic informational manifold." (Obidi's Third Conjecture)

Canonical Summary

The three conjectures may be summarized in their most compact form as:

First Conjecture

$$\boxed{\text{Entropy is the fundamental field of reality.}}$$

Second Conjecture

"All physical laws and interactions are derivable from the Entropic Field." (Obidi's Second Conjecture)

Third Conjecture

"Physical spacetime emerges from an entropic informational manifold." (Obidi's Third Conjecture)

Taken together, Obidi's Three Conjectures define the logical architecture of the Theory of Entropicity (ToE):

$$\boxed{\text{Entropy} \implies \text{Laws of Physics} \implies \text{Emergent Spacetime}}$$

with the **Obidi Correspondence Principle (OCP)** ensuring that every successful entropic formulation reproduces established physics in the appropriate limits.

For Details:

Reference(s):

🚀 Obidi's Three Conjectures in the Theory of Entropicity (ToE): A New Architecture for Fundamental Physics

🧩 What This Paper Introduces

A bold re-foundation of physics built on a single primitive: entropy.

This work presents Obidi's First, Second, and Third Conjectures, forming the core architecture of the Theory of Entropicity (ToE) — a framework that reimagines ontology, dynamics, and geometry from the ground up.

🌌 Conjecture I — Ontology

Entropy is the fundamental field of reality.

Not a thermodynamic statistic.

Not an emergent property.

But the primary substrate from which all physical structures arise.

⚡ Conjecture II — Dynamics

All physical laws and interactions are derivable from the Entropic Field.

Gravity, quantum behavior, gauge forces, matter, energy — all must emerge from entropic dynamics, constrained by the Obidi Correspondence Principle (OCP).

🕳️ Conjecture III — Geometry

Spacetime itself emerges from an entropic-informational manifold.

Geometry, curvature, and the metric are not fundamental — they are macroscopic projections of deeper informational structure.

Thus, Obidi explicitly teaches that our everyday experience of physical spacetime is a macroscopic projection of a deeper entropic-informational manifold, and that what we ubiquitously call "spacetime" is in fact the emergent geometry of underlying entropic information — meaning that beneath every point of spacetime lies entropic information

from which spacetime is extruded. That is, as Obidi declares to us in his Theory of Entropicity (ToE), the Fisher–Rao and Fubini–Study geometries live "beneath" each point of physical spacetime [of our everyday experience] — but we do not see them directly. We only see the macroscopic spacetime that emerges from them. We often think of spacetime as "made of nothing," a neutral stage on which physics unfolds; but Obidi teaches us that spacetime is made of fundamental entropic-information. What we perceive as spacetime is the macroscopic geometry that emerges from a deeper entropic-informational manifold.

🔗 Why This Matters

Together, the Obidi Conjectures form a hierarchical chain:

Entropy → Physical Laws → Spacetime

This structure offers a unified, elegant, and testable pathway toward a new foundational physics — one that challenges long-held assumptions about what is truly fundamental.

🔥 The Audacity of the Program

Many have proposed emergent gravity.

Many have proposed information-based physics.

Many have proposed entropy-driven models.

But none has attempted a full Blitzkrieg of Entropy (BoE) — connecting ontology, dynamics, and geometry through a single entropic chain — with the intellectual boldness of John Onimisi Obidi.

📘 Read the Full Paper

A deep dive into the logical independence, scientific motivation, and philosophical implications of the three Obidi Conjectures — and their role in the evolving Theory of Entropicity (ToE).

📚 Reference(s):

The Canonical Archives: https://entropicity.github.io/Theory-of-Entropicity-ToE/