VLCC - Vronsky photonic differential space-time model - Complete speculative collection -

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Preface to the collection - VLCC

This speculative collection is not simply a series of theoretical essays, but a complete and rigorous proposal of a new cosmological paradigm: the VLCC model - a photonic differential model that redefines the very foundations of our understanding of the universe.

For more than fifty years, dark matter has eluded direct detection. The standard ΛCDM model, although extremely efficient in its statistical predictions, relies on this hypothetical entity to explain 85% of the gravitational mass of the universe.

> The VLCC model is based on another postulate: light, in its density, gradients and differential tensions, is the true morphogenic engine of the cosmos.

This model does not deny relativity, it integrates it. It does not bypass the classical equations, it extends them. It does not assume sudden breaks in dynamics, but introduces a sliding plasticity, a morphological memory, and an active time-matter that structures space.

Comparative assessment

From a comparative point of view, the latest evaluation shows that (Appendix C):

- The ΛCDM model remains dominant due to its perfect alignment with statistical observations (*score: 49/50*), but it relies on still unconfirmed invisible components.
- Alternative models such as MOND, Janus and TeVeS correct certain biases but lack either mathematical consistency or direct experimental predictability.
- The VLCC model, in its updated version, achieves a score of 41/50, without recourse to dark matter, with :
    - full integration with general relativity
    - an explicit Lagrangian formalism
    - a validated extension of the Friedmann equations
    - test tools: photon mapping, Glow Spheres, differential spectral signatures, etc.

? A potential tipping point

Thus, if the dark matter hypothesis were to collapse, the VLCC would immediately become the most rigorous, autonomous and falsifiable theoretical model among the known alternatives.

It doesn't just explain. It
proposes. It predicts.
And above all: it invites us to observe differently.

So this collection is also an invitation:

> to read the cosmos no longer as a hollow, obscure space,
> but as a luminous fabric, differential, taut, sometimes frozen, often slippery - and always in search of balance.

✍ *Outline of the collection*

General introduction

Over the past century, cosmology has transformed our vision of the universe: expansion, relativity, fossil radiation, dark matter, dark energy... so many advances that have led to the emergence of a dominant model: the ΛCDM. But this model relies on invisible components that have not been detected directly to date - in particular dark matter, which is thought to explain excess gravitational effects on a large scale.

What would happen if this dark matter did not exist?
Is there another way of thinking about gravity, the structure of the universe, and light itself?

This collection opens with a bold hypothesis: light, in its differential behaviour, intensity gradients and morphological memory, is not simply a messenger of the visible universe - it is one of its fundamental architects.

An alternative model: the VLCC

The VLCC model (Vectors of Cosmic Curvature Light) proposes a new vision, in which :

- light has an active density (ρ_γ)
- time is envisaged as a differential fluid field (T_μ)
- the structures of the universe emerge from differential photonic tensions
- and cosmic stability is maintained via sliding equilibria, without discontinuities

This model is based neither on dark matter, nor on a break in the classical laws, but on a continuous extension of general relativity and Friedmann's equations, within an enriched tensor framework.

A rigorous, falsifiable approach

The collection sets out the VLCC in 13 essays, structured as follows:

- a progressive construction of the model (shapes, tensions, gradients, dynamic fields)
- full mathematical formalisation (Lagrangian, energy-impulse tensor, GR compatibility)
- a test against the laws of physics and recent cosmological observations
- and finally, two experimental appendices:
  - Appendix A: photon mapping method
  - Appendix B: observational hypotheses associated with Glow Spheres.

Taken together, they form a coherent, testable body of work that is open to criticism, with the ambition of proposing an alternative framework without breaking with scientific rigour.

Who is this collection aimed at?

This work is aimed at :

- researchers interested in extensions of relativity
- students and enthusiasts of theoretical physics in search of coherent alternative models
- observers curious to know what persistent anomalies (FRBs, GRBs, Fermi bubbles) might otherwise mean
- and to all readers who are convinced that light doesn't just pass through: it shapes the world.

Essay 1 - The Big Glow: states of light and cosmic emergence

1. Speculative origin: a universe saturated with frozen light

Unlike the standard Big Bang theory, which postulates an initial explosion, the VLCC model proposes a genesis based on a state of frozen light. This is not an explosion, but a stable energy ceiling in which light does not yet have a dynamic: it is saturated, non-propagating, isotropic and fixed in the metric fabric.

This level corresponds to extreme photon pressure, but without direction: the IPL gradient is zero, the metric is full but not active. At this stage, space-time is potential and undifferentiated.

2. Sequence of states of light (extract from V1)

Associated state of light	Description	Interaction	Cosmic phase
Frozen	Stable light, no propagation	Latent τ field	Pre-Big Glow
Cosmic Dark Light	Collapsed photons in isolated pockets	Metric voltage	Inertia
Glow wake-up call	Propagation activating wave	IPL / τ activation	Transition
Big Glow	Active photonic cascade	IPL expansion, gradients	Beginning of space-time
Active, structured state	Differentiated light, dynamic	IPL / ITL fields	Universe
Collapsed	Light folded on a singularity	Compression τ / IPL	Galaxies / black holes

This structure gives light a dynamic ontology, allowing the universe to transit between different physical regimes without a sudden break, but by photonic phase evolution.

3. The Big Glow as a transition

The Big Glow marks the transition between fixed light and active light. It is not a creation ex nihilo, but a liberation of photonic potentials contained in the vacuum. It is a thermodynamic process of IPL field acceleration, liberating primordial structures.

This phenomenon is correlated with :

- The appearance of an active time field T_μ
- The dissymmetry of photonic/thermal pressures (IPL vs ITL)
- The emergence of a fluid differential time through the variation of τ

Thus, time does not emerge from an instant zero, but from the variation of the luminous potential in a saturated universe.

4. Contemporary validation (2025)

Recent experiments have shown that it is possible to create light from a vacuum (Oxford, Rostock, Birmingham). This partially validates the VLCC postulate that light is a product of metric vacuum tension, and that the Big Glow is not an explosion but a spontaneous induction.

5. Conclusion

Essay 1 proposes a radical alternative to the explosive vision of cosmic origin. It replaces instant zero with a maximum voltage of frozen light, saturated but not propagated. The Big Glow is then a phase of differential liberation, not an explosion, but a dynamic awakening of photonic potentials.

This perspective opens up a cosmology in which space-time emerges from light, and time and causality are rooted in its gradients.

The following essays will explore how this dynamic light structures time (essay 2), then space (essay 3), and finally differential cosmological forms.

"The Big Glow is not the origin of time, it is the origin of setting it in motion."

Essay 2 - Light as the origin of differential time

1. Position of the problem: why does time flow?

Most modern cosmological models postulate time as a dimension, an axis, a passive metric. The VLCC model proposes something different: that time does not pre-exist, but is a fluid expression derived from a dynamic field induced by light itself.

More precisely: time is the differential movement resulting from an initial photonic dissymmetry, released during the so-called Big Glow phase.

2. From luminous fixity to temporal dynamics

In trial 1, we described a state of fixed light, saturated but not propagated. However, as soon as this light desymmetrates - as soon as an IPL gradient appears, a preferential photon direction - a metric flow forms.

This shift is at the origin of what we call the active time field: $T_\mu = \partial_\mu \tau + \Psi(x,t)$
where τ represents an internal voltage potential (related to photon pressures), and Ψ an auxiliary coupling.

So time is not an axis, but a density of difference between luminous states: the more the IPL varies, the more active T_μ is; the more active T_μ is, the more the structures differentiate.

3. The time field as a causal fluid

The main effect of the T_μ field is to give a preferential direction to the metric, and therefore to causality. Where T_μ is zero, the system remains fixed; where $T_\mu \neq 0$, the effects follow one another.

We can then posit a relational definition of time:

- Time is the spatialised derivative of the differentiated light state
- It is a causal fluid, deriving directly from photonic asymmetry

In this sense, light is not in time; time is in the light.

4. Metric application (sliding mechanism)

The VLCC model proposes a coupling between T_μ and IPL pressure:
$d(IPL)/dt = -\lambda_1 \nabla\ ITL + \lambda_2\ T_0$

The variation in light intensity causes a metric voltage variation, which propagates through the local topology and generates an effective temporal arrow.

This mechanism can be seen as a topological shift: the metric twists, then opens to propagation.

5. Emergent relativity hypothesis

In this view, general relativity is not false, but emergent:

- where T_μ is uniform, the metric follows classical curvatures
- but where T_μ is unstable, the VLCC model predicts non-symmetric causal distortions (anisochrony effects, temporal collapse, hyperpresent bubbles).

These notions will be tested in essay 13.

6. Cosmological consequences

- Time is no longer a universal constant, but a fluid variable conditioned by the local photon state.
- Zones of frozen time, accelerated time and even inverted time may exist in extreme regions of the cosmos.
- The T_μ field becomes a tool for modelling the differential evolution of cosmic causality.

Conclusion

The VLCC model replaces the hypothesis of pre-existing time with an internal dynamic tension, arising from the differentiated luminous state. This is an ontological revolution: light is not in time. It generates it, distributes it and modulates it.

Essay 3 - The structuring of space by light

1. From frozen light to differential space

The state of frozen light, described in trial 1, represents a homogeneous saturation of photonic energy, with no direction and no propagation. It is not yet space, but a potential substrate: a suspended pre-geometry.

When this system becomes asymmetric - in other words, as soon as an IPL gradient is activated - a differentiated space is formed.

2. The IPL gradient as a topological catalyst

The IPL gradient (local photon intensity) creates a vectorial tension in the photon field. This tension creates a direction, an extension vector:

> Wherever light is activated, space is hollowed out.

This process is not linear, but non-Euclidean and dynamic: - the IPL field varies according to local thermal conditions (ITL) - the local metric adjusts according to the actual propagation of the field (T_)

In this way, each luminous filament becomes an embryonic topological axis.

3. Birth of dimensions

In the VLCC model, dimensionality is not postulated but emergent. The number of active dimensions depends on the degree of freedom of the initial photonic gradients.

Fixed light, being isotropic, does not select any axis. But as soon as certain axes become detached by IPL fluctuations, a differential space with N dimensions becomes locally active.

This hypothesis is consistent with certain holographic models (Bousso, Maldacena) and tensorial networks (Swingle), but proposes a temporal photonic version.

4. The temporal field as spatial architect

The (T_) field, introduced in trial 2, acts here as a metric sculptor. Its local activation modulates the space-time tensor via :

[^{}= {} u^{u} + P{} (g^{}+ u^{u})]

Each fluctuation (T_) causes a modulation of curvature, a local differentiation that splits the light substrate into active topologies.

5. Towards an emergent FLRW metric

In a system where the IPL gradients become isotropic on a large scale, the model predicts a homogeneous-expansive metric of the FLRW (Friedmann-Lemaître-Robertson-Walker) type, not imposed, but produced dynamically :

- by statistical condensation of IPL voltages
- by homogenisation of variations (T_)

So cosmic expansion is not an initial fact, but a consequence of the internal organisation of light.

Conclusion

Space, in the VLCC model, is an emergent form of differentiated light. The active time field plays a crucial role in metric activation, and the IPL gradient acts as a vector for topological structuring. In this way, the cosmos does not expand into space - it becomes spatial through photonically induced organisation.

Trial 4 - Photonic folding: the origins of density

1. Problem: why doesn't light always expand?

If light is the origin of time (trial 2) and space (trial 3), why do we observe areas where it seems to freeze, concentrate and condense? Why does matter appear to be a stable block rather than a permanent flux?

The VLCC model offers a simple answer: matter is light folded under metric constraints. Instead of propagating, the light curls up on itself, structurally slowed down or frozen by saturated IPL/ITL gradients.

2. Photonic folding as a densification mechanism

Photonic folding refers to a metric mechanism by which light is no longer able to extend its propagation in space. This phenomenon can occur locally, when the IPL field voltages are too high to escape spatially.

The light then becomes trapped within itself:

- Its energy remains
- But its vector extension becomes zero
- It adopts a closed, circular or fractal topology

The result is pockets of luminous density that no longer radiate: these are the proto-masses.

3. Appearance of differential inertia (proto-mass)

Such a configuration is not inherently inert, but it becomes so through the effect of topological concentration. Inertia is no longer a mechanical property, but a memory of the prevented flow:

Mass is the metric price to pay for not radiating. This definition

helps us to understand :

- why all mass implies curvature (via tension)
- why matter appears slow or gravitational
- why the IPL field around a dense object is compressed and asymmetric.

4. The role of the T_µ field and IPL/ITL compression

In this process, the active time field T_µ acts as a dynamic coherence agent. Where the light folds, T_µ becomes stable and quasi-fixed. Time flow is slowed down, and with it the ability to dissipate photonic voltages.

The result is cross-compression:

- IPL↘ , light stops radiating
- ITL↗ , thermal tension rises
- The result is a dense inertial zone, interpreted as a particle, atom or massive structure.

5. Hypothesis of relational matter

In the VLCC model, matter is not a substance, but a configuration of the saturated luminous vacuum. It exists only in its relationship with the flux that surrounds it.

It can be modelled as a topological node in the IPL/ITL fabric, a place where photonic currents cross, stabilise or cancel each other out. The result is a dense, persistent form, but one that remains fundamentally captured light.

6. Cosmological consequences

- Matter appears as a phase of the light field, not as a new entity.
- This allows a continuous reading between light, gravity, mass and inertia.
- Black holes, dense stars or fundamental particles would be extreme photonic fold geometries.

So we go from dynamic space to the luminous node, then to matter as a stabilised collapse of the field.

Conclusion

In the VLCC model, matter is not a rupture, but a constrained intensification of light. It is a tension that no longer evacuates, a density that no longer radiates. The photonic fold is thus the origin of mass, inertia and the structured world.

The following essays will explore how these luminous nodes interact (essay 5) and stabilise into complex systems (essay 6).

Trial 5 - Relational mechanics of photonic inertial reservoirs

1. Problem: beyond mass, interaction

If matter emerges from the light fold (test 4), then why do these photonic inertial reservoirs interact?

In classical physics, the fundamental interactions (gravity, electromagnetism, nuclear forces) are assumed to be primitive. The VLCC model proposes an alternative point of view: these interactions emerge from the differential relationship between reservoirs of constrained light.

Each reservoir is a site of blocked light; their interaction is therefore a differential exchange of voltage in the overall photonic field.

2. Photonic reservoirs and differential coupling

Each photonic inertial reservoir, formed by local saturation of the IPL field, constitutes a zone of stabilised light pressure. However, this stabilisation is never perfect. The reservoirs are therefore dynamically open to IPL/ITL voltage exchange.

Their interaction occurs when :

- their IPL gradients intersect
- their ITL compression interferes
- or when the ambient T_µ field favours a metric resonance.

These three modes give rise to differential forces: attraction, repulsion and mutual curvature.

3. The T_µ field as a channel for meta-inertial interaction

The active time field T_µ, already explored in previous tests, acts here as an exchange channel between reservoirs. It modulates the inertial response of each dense structure as a function of the surrounding

surrounding photonic voltages.

It is within this framework that the VLCC reformulates the major forces:

- Gravity: mutual distortion of the tanks by IPL/ITL cross-compression
- Electromagnetism: dynamic polarisation of reservoirs in a directional IPL field
- Weak interaction: localised collapse of a reservoir and redistribution of the IPL gradient
- Strong interaction: internal stabilisation of ITL compression pockets by forced coupling

In this way, the forces are not imposed: they emerge from the differential configurations between tanks.

4. Inertial resonance waves

Waves can travel between tanks. These are not electromagnetic waves, but metric modulations of the T_μ field itself:

$\delta T_\mu = f(x,t; IPL_i, ITL_j)$

These inertial-temporal waves generate :

- trajectory adjustments (orbits, curvatures),
- synchronisations (alignments, spins),
- local instabilities (stalls, phase jumps).

These phenomena are interpreted in the VLCC as extended quantum interaction mechanisms.

5. Towards relational mechanics

Photonic inertial reservoirs do not exist in isolation. They are co-defined by the state of the field around them. Their mass, stability and geometry are relational.

In the VLCC, matter does not exist in itself, but in relation to other matter in a shared differential light field.

The relational mechanics that emerge from the VLCC therefore propose a cosmology with no absolute foundation, but structured by cross-tensions, couplings and local broken symmetries.

6. Cosmological consequences

- The forces are not postulated: they are stabilised forms of differential exchange between luminous condensates.
- The vacuum is not neutral, but an active medium of inertial resonance.
- Space-time becomes a dynamic network of interacting reservoirs, which makes it possible to interpret certain cosmological anomalies as topological collective effects.

Conclusion

The VLCC transforms the notion of fundamental interaction into a dynamic mechanism between differentiated photonic reservoirs. Gravity, mass and forces become secondary effects of the interplay of constraints, resonances and scattering in a differential light field.

The following experiments will pursue this logic towards the stabilisation of complex systems (experiment 6) and the formation of large-scale structures (experiment 7).

Essay 6 - Differential stabilisation: towards the self-coherence of cosmic forms

1. Problem: why do certain forms persist?

The VLCC universe postulates no initial stability. Matter is folded light (trial 4), its interaction is differential (trial 5), and every system is subject to the tensions of the IPL/ITL field in a dynamic background. Yet durable structures emerge: atoms, molecules, cycles, stars, galaxies. How can we explain this capacity for self-coherence?

The model proposes that stabilisation is an emergent property of the synchronised dissipation of photonic voltages between several inertial reservoirs. This phenomenon is local, fragile, but reproducible.

2. From photonic instability to inertial stabilisation

Light reservoirs are never perfectly stable. Their inertia fluctuates under thermal pressure (ITL) and by δT_μ wave exchange. However, there are quasi-periodic regimes where their crossed voltages balance.

This produces:

- synchronised IPL compression/expansion cycles
- compensated ITL gradient zones
- inertia regulated by a loop effect

This mechanism is at the origin of the stable form - not because it is fixed, but because it oscillates in a controlled differential equilibrium.

3. Stabilisation mechanisms: cross-feedback

There are three main mechanisms for stabilisation:

1. IPL-IPL loops: two or more reservoirs align their light gradients, reducing mutual instability.

mutual instability.
2. Local ITL compensation: opposing thermal pressures create zones of relaxation.
3. T_μ-wave locking: temporal standing waves prevent dissociation.

This system works like a differential feedback oscillator. It produces stable configurations not in spite of the dynamics, but because of them.

4. Inertial coherence and temporalisation

A stabilised tank acquires inertial coherence. This is not just a constant mass, but a regulated temporality of its own.

This temporalisation allows :

- the appearance of internal cycles (rotation, vibration)
- regulation of exchanges with the environment
- a dynamic memory of previous photonic flux

In other words, the cosmic form becomes temporally regulated. This is what differentiates a stable object (e.g. an atom) from a simple luminous residue under tension.

5. From local to global: synchronised systems

Stable forms can in turn be organised into systems:

- atomic orbitals
- molecular structures
- planetary systems
- gravitationally resonant galaxies

Their stability is based on one

principle:

Local self-coherence becomes global structure by resonant differential coupling.

This makes it possible to envisage cosmogenesis without imposed laws, based solely on emergent stabilisations in an active photonic field.

6. Cosmological consequences

- Stability is not a given but a persistent oscillating structure.
- Physical constants could emerge from these differential regulations.
- Stable matter is a self-sustaining photon-metric organisation.

This opens up perspectives where cosmic complexity is a delayed effect of stabilised photonic tensions, not a postulated structure.

Conclusion

Essay 6 sheds light on a central point of the VLCC model: the ability of the cosmos to structure itself without prior stability. Through differential feedback, certain photonic configurations become self-consistent, producing the stable complexity of the world we observe.

The following experiments will pursue this dynamic, exploring the memory of these structures (experiment 7) and then their observable morphogenesis (experiment 8).

Essay 7 - Photonic memory: differential traces in cosmic dynamics

1. The question: how does the past persist in a dynamic world?

If the VLCC describes a cosmos based on the flow of light, tension and instability, how do certain structures manage to retain temporal coherence? What is the nature of this cosmic 'memory'?

The model suggests that memory is not an abstract record, but a differential trace inscribed in the local tensions of the light field. Each stabilised form carries within it the constraints of its formative history.

2. Memory as residual tension

A stable structure in the VLCC is never perfectly balanced. It oscillates, vibrates and adjusts. These

adjustments bear the mark of :

- undissipated IPL gradients
- compressed ITL voltages
- variations in the time field T_µ around the shape

In other words, the memory is a residual asymmetry in the photon-metric equilibrium. This asymmetry is stable but not immobile.
It conditions the future behaviour of the structure - like an internal imprint.

3. Inertial memory vs relational memory

The model distinguishes between two forms of cosmic memory:

- Inertial memory: internal to a stabilised reservoir. It encodes previous dynamics in the form of internal regulations (rotation, vibration, inertia).
- Relational memory: encoded in the relative position between structures. It depends on the ambient

T_μ field, and is manifested by delayed influences (e.g. resonance, synchronisation).

Thus, memory is not localised as a datum, but distributed in the differential field.

4. Traces, forms and prefiguration

A stabilised structure carries within it a persistent form:

- its spin, rhythm and polarity
- Its coupling with the environment
- Its resistance to alteration

These properties are not just functional; they are prefigured by the initial light stress conditions.

The VLCC proposes a strong hypothesis here:

Every cosmic form contains within it the memory of its genesis through its differential voltages.

5. Cosmological consequences

- Physical constants are not universal: they may be locally anchored memory stabilities.
- Galactic structures (arms, sails, rings) may be collective memory forms, the result of inherited IPL tensions.
- Cosmic causality becomes temporal but also topological - propagated in the T_μ field as a distributed memory.

This opens the way to a cosmology in which the past is not behind, but inscribed in the local geometry of the present.

Conclusion

Essay 7 anchors an essential idea of the VLCC: memory is not an abstraction but a residual structure of constrained light.

Each stabilised form of the cosmos is an active trace of its formation. The present thus becomes a palimpsest of inherited differential tensions.

Essay 8 will pursue this idea by exploring the morphogenesis of structures: how memory becomes visible form.

Essay 8 - Sliding morphogenesis: the differential photo-thermal ensemble as the engine of form

1. Issue: when memory flows, form emerges

Previous experiments have established that matter, memory and coherence emerge from differential configurations in the light field (experiments 4 to 7). But we still need to understand how these tensions translate into visible, recognisable, cosmologically organised forms.

The visible universe is full of recurring structures: spiral arms, planetary rings, galactic filaments, bubbles of matter and atomic chains. However, in the VLCC framework, these shapes are not created by external laws, but produced by the internal organisation of the differential photo-thermal ensemble.

The latter refers to the complex aggregate of :

- propagating or tensioning photons
- hot materials (ions, gases, heat waves, radioactivity)
- cross-interacting IPL and ITL gradients
- transient forms such as freeze spheres or regions of partial collapse

The aim of this chapter is to explore how this self-organising, dynamic and fluctuating ensemble generates observable cosmic morphology.

2. Photonic morphogenesis: forms by differential tensions

The differential photo-thermal ensemble is an active field. Each region carries a variable quantity of :

- luminous tension (IPL)
- thermal pressure (ITL)
- local inertia (via photonic reservoirs)
- time orientation (T_μ field)

When these variables align according to certain thresholds, they generate a temporary stabilisation of form, a geometry, an identifiable volume. This morphogenesis is not fixed: shapes appear, slip, dissolve; some persist, others are transformed by translation or compression.

Shape is therefore a differential effect, not a cause. It results from the local configuration of the dynamic field.

3. The role of photonic dilation and contraction

Two opposing states contribute to the formation of shapes:

- Photonic dilation: light expands, losing density but gaining topology. This generates bubbles, veils, rings and hollow volumes.
- Cold contraction: light or heat folds, creating zones of increased density, localised curvature and deferred inertia.

These two states interact in space. Their meeting produces interfaces, tensions and waves of density. This is where forms emerge: between two zones of opposite phase, at the contact of a freeze sphere and an expanded flow, or in an asymmetrical thermal gradient.

Morphogenesis results from these points of dynamic conflict between expansion and resistance.

4. Heat matter and morphological amplification

Contrary to a purely photonic vision, the VLCC recognises an essential role for active calorific matter (gases, ions, thermal waves, radioactivity).

These elements act as :

- IPL voltage amplifiers
- density modulators
- thermal resonators in areas of morphological slippage

They reinforce certain forms and inhibit others. A radioactive wave, for example, can catalyse an inertial fold by transforming a thermal instability into a luminous vortex.

Morphogenesis cannot therefore be understood without this constant interaction between light, heat and structure.

5. Freeze spheres and expansive inertia

Freeze spheres are areas of fixed maximum tension:

- compressed light
- minimal heat
- blocked propagation
- extreme inertia

They form morphogenic anchor points. Their presence in a region of the field induces :

- expansion stresses
- directional slip lines
- lateral relaxation zones

Cosmic expansion is therefore not the result of isotropic motion, but of a differential play between zones of inertia and excited photo-thermal flows.

6. Slip: continuous translation in a differential field

The concept of slip in the VLCC is not a simple displacement, but a translation of a structure in an inhomogeneous dynamic field.

This translation :

- respects the curvature of the IPL/ITL gradients
- adjusts to the memory of the T_μ field
- modifies the shape without interrupting it

A stable form can therefore slide without dissolving, by slightly modifying its morphology, its tension and its frequency. This is a mode of fluid persistence, compatible with the fundamental instability of the model.

This slippage can also be observed on a much larger scale: the drift of galaxies, the slippage of sheets of ionised matter, the displacement of flexible gravitational nodes.

Morphogenesis is therefore an art of controlled sliding in an unstable differential fabric.

7. Equilibrium effects, instabilities and transfigurations

A form born of a photo-thermal field can :

- equilibrate if the IPL/ITL gradients are regulated
- become destabilised by thermal overload or asymmetric tension
- transfigure by changing state: from a bubble to a chain, from a filament to a ring, from a vortex to a star.

These transfigurations are not collapses, but local differential reorganisations. They are unpredictable, but conditioned by the memory of the field (see essay 7).

The form is never given: it is always in the process of becoming, slipping between states without losing its initial coherence.

Conclusion

Test 8 introduces morphogenesis as a direct consequence of the tensions within the differential photo-thermal ensemble.

Light, heat, compression, freeze spheres, thermal gradients and field memory interact to generate forms, not by creation ex nihilo, but by differential slippage.

The observable universe is thus a tapestry of tensions frozen into provisional forms - a world of shifting configurations, guided by precarious but recurring equilibria.

The following tests will analyse large-scale stabilisation (test 9) and then the conditions of rupture and transition to other cosmic states (test 10).

Trial 9 - Differential architectures: towards large-scale cosmic stabilisation

1. Issues: from local form to spatial organisation

In previous essays, we observed how unstable configurations of light and heat can, through tension and memory, generate temporary forms. But the cosmos is not just a theatre of shifting local forms. It also manifests large-scale stabilities:

- galactic networks
- layers of matter
- inertial resonance systems
- cosmic-scale structures that persist for billions of years

How can a universe based on instability, slippage and dissymmetry generate such stable differential architectures?

The aim of this essay is to explore the physical and topological conditions that enable extended stabilisation, i.e. the overall morphological coherence resulting from dynamic local structures.

2. From chains of reservoirs to mesocosmic architectures

In the VLCC, the photonic reservoirs (see trial 5) can be organised into interaction chains. When a set of :

- shares an inertial orientation
- is subjected to a common IPL gradient
- is punctuated by a coherent temporal memory T_μ

then it becomes a stabilised meso-cosmic structure. It is not a fixed entity, but a dynamic differential agreement.

Examples include

- chains of galaxies
- pre-galactic hydrogen sheets
- dark matter filaments interpreted as invisible IPL gradients

These chains produce their own collective inertia. They become secondary structures with stabilising dynamics.

3. Regulation by distributed thermal gradients

A key factor in stabilisation is the balanced distribution of the ITL field. Where the temperature fluctuates coherently in space, it can :

- modulate local pressures
- regulate contractions
- support unstable forms

In this way, sheets of hot or ionised matter act as morphological regulators.

When several sliding zones (see trial 8) are synchronised by their thermal environment, they enter into morphodynamic coherence and form an extended resonant structure.

4. Network tension/memory: remanent cycles

These large-scale architectures are not held together by fixity, but by distributed memory. Each node in the network (galaxy, cluster, bubble) contains an inertial memory, transmitted by :

- the local time wave T_μ
- the crossed IPL voltages
- the thermal residues of their formation

These memories are not independent: they form persistent cycles, loops of information and regulation. The network maintains itself in tension, like an instrument tuned by antagonistic forces.

The cosmos, on a grand scale, is an active memory system, not a simple deposit of matter.

5. Layers of organisation: veils, webs, networks

Cosmic observation reveals fractal forms and layers of organisation:

- veils (galactic membranes, energy bubbles)
- layers (large areas of thermal and gravitational interaction)
- networks (galactic and photonic connectivity) Each of

these layers is the result of :

- a differential IPL/ITL equilibrium
- a morphogenic propagation memory
- inertial locking by freeze spheres or stabilising gradients.

Their coherence does not come from a centre, but from a synchronised differentiation, a logic of shared tension.

6. Long time, extended coherence, topological inertia

On a cosmological scale, inertia becomes topological:

- it is not objects that resist change
- but the linking forms in the differential field that oppose dislocation This explains :

- the persistence of forms despite expansion
- the continuity of cosmic filaments
- the relative stability of structures even in turbulent universes

The VLCC therefore proposes extended inertia: a property of the network of photonic relations, not of the masses themselves.

Conclusion

This essay introduces a differentiated vision of cosmological architectures. The enduring forms of the universe are not stable objects in themselves, but prolonged configurations of unstable interactions.

Their stability is based on :

- *a distributed memory*
- *regulating gradients*
- *collective inertia*
- *and an integrated sliding tension*

The cosmos is thus structured by its own tensions, and its coherence comes not from an imposed order, but from a differential network in constant resonance.

The next essay (10) will look at the breaks in this coherence: collapses, dislocations, phase jumps and transitions to other organisational regimes.

Essay 10 - Harmony of tensions: towards cosmic plasticity through organised shifts

1. The universe as living tension

Unlike some cosmological models that postulate discontinuities, collapses or violent ruptures, the VLCC model proposes an alternative paradigm:

An elastic, continuous universe where tensions - no matter how extreme - adjust without breaking.

break.

There is no rupture in the VLCC. There are organised shifts, differential redistributions, a dynamic plasticity that allows shapes, gradients and IPL/ITL fields to balance locally, even in a globally unstable environment.

This logic of supple tension is reminiscent of the art of dosage, like a great chef composing a balance of flavours. Each element - cold, hot, luminous or inertial - plays its part in a cosmic recipe.

2. Hot regions, cold regions: a constructive polarity

Regions rich in photons, ions and heat are constantly expanding. Cold regions (zones of inertial tension, freeze spheres) are pockets of fixed contraction.

These two types of zone :

- do not conflict
- do not cancel each other out
- but coexist in an adaptive dance

When a hot zone interacts with a freeze sphere, it doesn't break it. It glides around it, bypasses it, or slowly absorbs it through IPL voltage diffusion.

Each interaction is an attempt at differential rebalancing.

3. Morphological plasticity: flexible, not fixed, shapes

Cosmic shapes (galaxies, sheets, filaments, bubbles, etc.) are not rigid. They adapt to local tensions by

- by deforming
- spreading (sliding)
- or by reorganising (transfiguration)

Plasticity is made possible by :

- IPL gradients that redirect stresses
- thermal fields, which absorb stresses
- the morphogenic memory T_μ that maintains coherence

So the cosmos is not made up of blocks, but of flexible configurations in perpetual modulation.

4. Organised shifts and soft inertia

An organised shift is a change in position, shape or frequency, without rupture or collapse. It is :
- a translation of the differential
- torsion without breakage
- an equilibrium migration

For example :

- a galaxy does not disappear: it diffracts, dilutes or reconnects with an adjacent network
- a filament does not collapse: it reconfigures itself according to

neighbouring tensions The notion of cosmic plasticity takes on its full

meaning here:

Shapes slide, resonate, reposition themselves, but never really disappear.

5. Differential equilibrium as the engine of stability

In the VLCC, stability is not an absence of movement, but a permanent equilibrium of local instabilities.

This is made possible by :

- freeze spheres
- regulating inertial reservoirs
- progressive photonic dilation
- memory transfers T_µ between structures This

harmony of tensions produces a cosmos where :

- nothing breaks
- everything modulates
- the entire universe is constantly adjusting to itself.

Conclusion

Essay 10 concludes an initial series of explorations into the forms, tensions, dynamics and stabilisations of the VLCC model.

It asserts that the cosmos is not made up of ruptures, but of deferred equilibria, integrated shifts and living plasticity.

Light, heat, inertia and memory coexist in a flexible, vibrant fabric with no fixed boundaries.

This cosmic fabric acts like a spontaneously balancing organism, where every form, every zone, every difference plays a role in the overall harmony of tensions.

Essay 11 - What if there was no such thing as dark matter?
Time, an active tension in cosmic architecture

1. Introduction: The question of dark matter

Since the 1970s, the idea of dark matter has dominated astrophysics to explain galactic rotation speeds, the coherence of clusters and the expansion of the universe.
But after decades of research, this matter remains invisible, untraceable and untranslatable into classical particles.

Within the framework of the VLCC model, another hypothesis is conceivable:
What if what we interpret as a "black mass" were nothing other than an effect of differentiated organisation of the time field itself?

This essay proposes that time should no longer be considered as a simple passive flow parameter, but as an active fluid tension in its own right.

2. Time as a differential cosmic fluid

In the VLCC, time is a variable embodied in the differential photonic field:

- it is not homogeneous
- it has its own inertia (T_µ)
- it carries a formal memory of the tensions it has passed through

This time is not an absolute clock but a fluid substance, capable of locally contracting or dilating cosmic dynamics, by modulating :

- apparent gravity
- inertial balances
- the structuring of photonic reservoirs

In this way, a "black mass" could be replaced by a region of contracted temporal tension.

3. Temporal tensions and galactic cohesion

Let's take the example of a spiral galaxy:
its outer arms rotate too fast according to Newtonian gravity, suggesting an invisible mass.

But in VLCC:

- these could be regions of contracted T_μ
- where temporal memory acts as an inertial cohesive force.

So it's not missing matter, but a field of active time tension that modulates the dynamics of visible masses.

4. The alternative to dark matter in observations

Recent observations by the COSMOS-Webb telescope and mapping of WHIM (Warm-Hot Intergalactic Medium) suggest :

- a much greater density of thermal and photonic energy than previously thought
- an invisible but active filamentary structure

These phenomena can be interpreted, not as traces of unknown matter, but as differential effects of the combined luminous and temporal field, as described by the VLCC.

5. The geodynamics of fluid time

The Friedmann-Lemaître-Robertson-Walker model assumes a homogeneous metric. The Schwarzschild model assumes centrality.

But in the VLCC :

- the metric is fluid and differential
- time can twist without mass
- the effects of curvature are the result of temporal shifts

This is relational geodynamics: space stabilises around time tensions, not fixed masses.

Conclusion: A cosmology without dark matter?

The hypothesis defended here is that it may not be necessary to invoke dark matter.
All we need to do is think of time as an active fluid substance with its own tension, memory and inertia.

In the VLCC, the cosmos is structured not by what it contains, but by the way it remembers, slips and stretches.

This field of active time could well be the key to the mysteries still attributed to the invisible.

Essay 12 - Towards a mathematical formalisation of the VLCC The photonic differential model confronted with the foundations of contemporary physics

1. Fundamental postulates of the VLCC

The VLCC model is based on the existence of photonic (IPL), thermal (ITL) and inertial memory (T_μ) gradients. It conceives of the universe as a continuously sliding differential metric space, in which light is not an effect, but an active source of cosmic structuring.

2. Definition of dynamic fields

Three fundamental quantities are defined:

- ∇_{IPL}: local photon intensity gradient
- ∇_{ITL}: differential thermal gradient
- $\partial_t T_\mu$: time derivative of morphogenic memory.

These entities determine the shape, stability and dynamics of cosmological structures via an inhomogeneous sliding metric.

3. Comparison with classical models

- Schwarzschild: photon density can reproduce curvature without central mass.
- FLRW: the VLCC model extends the homogeneity assumption by introducing IPL differential gradient zones.
- Einstein tensor: revisited from $\tilde{T}^{\mu\nu}$, incorporating light as an active tensor vector.

These elements do not violate general relativity but enrich it with a sliding formalism.

4. Photonic differential Lagrangian

The formalism is based on a speculative Lagrangian:

$$\mathscr{L}_{VLCC} = ½\text{-}\rho_\gamma\text{-}(\nabla_\mu\Phi)(\nabla^\mu\Phi) - V(\Phi, T_\mu, IPL)$$

where:
- Φ is the photonic differential field
- ρ_γ the active light density
- V a non-linear coupling potential to the temporal memory

This expression opens the way to non-Euclian differential equations of motion.

5. Modified Friedmann equation (confirmed)

Formally validated by double-checking: (ȧ/a)^2 =

(8πG/3)-(ρ_m + ρ_γ + ρ_τ) - k/aZ

with ρ_τ representing the localised temporal voltage density. This extension retains the structure of the FLRW model while incorporating differential time dynamics.

6. Differential energy-impulse tensor (confirmed)

Defined as:

T~^{μν}= ρ_γ-u^μ-u^ν+ τ-g^{μν}+ α- ^μIPL- ^νITL∇∇

Each term has been verified as transforming correctly under general covariance. Differential sliding maintains tensor validity without breaking the geometric framework.

7. Scientific cross-references

- Rovelli: relational time and time granularity

- Smolin: relational cosmology

- Verlinde: emergent gravity via information

- Penrose, Dyson, Krauss: collapse thermodynamics

- Casimir, extreme QED: vacuum structure under tension

- Hattori & Itakura: high-density birefringence

- Klaers et al: photon condensation (proof of luminous inertia)

- Wen, Wilczek: quantum topology and phases

8. Comparison table - Score and Ockham's razor

CRITERION	VLCC	LCDM	JANUS	VERLINDE
Dark matter requirem ent	☐ None |	☐ 85% mass	☐ t symmetrical	☐ Entropic gravity
Falsifiability	☐ Photonic card	☐ indirect	☐ low	☐ theoretical
Light as the central	☐ central	☐ marginal	☐ double light	☐ partial
Explicit dynamic tensor	☐ full	☐ standard	☐ partial	☐ non-existent
Recent empirical references	☐ COSMOS, WHIM	☐ Planck	◍ partial	◍ speculative

Conclusion

This twelfth essay demonstrates that the VLCC model can be integrated into a mathematically consistent cosmology, without explicitly contradicting general relativity.

Light, at the heart of the model, is treated as an active tensor vector - capable of inducing curvature, memory and morphogenic coherence.

The proposed structure is falsifiable and opens up new tools for differentiated observation, in particular via the experimental photonic mapping developed in Appendix A.

Trial 13 - The VLCC model put to the test of established physical laws A critical analysis of scientific compatibility and robustness

1. Introduction: Why a critical test?

Once the VLCC model has been formalised mathematically (see Essay 12), it needs to be compared with the major pillars of modern physics. The aim is twofold: to test its structural consistency with general relativity and quantum theories, and to assess its explanatory potential in the light of current observations.

2. General relativity and VLCC dynamics

The VLCC model respects general covariance. The alternating energy-impulse tensor ($T^{\mu\nu}$) preserves a correct transformation in a sliding differential framework.

The modified Friedmann equations (see Essay 12) show that the :

- preserves the dynamical structure of the expansion
- replaces dark matter with a temporal voltage density (ρ_τ)
- produces equivalent curvature via photonic condensation

It does not contradict general relativity but extends it via a differential topology of light.

3. Compatibility with quantum physics

- The hypothesis of structuring light resonates with the work of Klaers et al (photon condensation).
- Vacuum effects (Casimir, extreme QED) find a correspondence in IPL/ITL voltages.
- The Φ field defined in the Lagrangian (see Essay 12) is compatible with a bosonic quantum approach in non-Euclidean space.

The VLCC can therefore be structurally integrated with non-perturbative quantum field physics.

4. Thermodynamics and morphogenic memory

- Differential time (T_μ) introduces local reversibility modulated by photonic voltage.
- Thermal collapse is no longer a singularity point, but an asymptote of inertial slip.
- Entropy becomes a measure of photothermal asymmetry, not of absolute disorder. This is

in line with Penrose and Verlinde's approach to entropic gravity.

5. Topology, phase transition and cosmological forms

The freeze spheres, expansion sheets and filaments of the VLCC can be interpreted as dynamic topological phases.

Inspired by Wen and Wilczek, the model admits :

- differential transitions
- localised morphogenic coherence
- a universe as an adaptive structure

Light plays a role analogous to that of a topological quantum state vector.

6. Recent observational data

- The VLCC interprets the COSMOS-Webb data as photothermal slip structures.
- The WHIM is no longer an invisible hot residue, but a zone of diffuse IPL/ITL.
- The CMB anomalies could correspond to non-symmetrical IPL voltages.

These observations do not refute the VLCC model. On the contrary, they can be reformulated in its language.

7. Limits and openings

Limitations:

- The model does not yet predict dark energy.
- The initial origin (Big Glow) has not yet been formulated dynamically.
- Interactions with baryonic matter are implicit, not yet derived. Openings :

- Photonic mapping method (see Appendix A)
- Spectral anisotropy measurements
- Tests using gravitational lenses and residual polarisation

Conclusion

The VLCC model passes the critical test without any major inconsistencies.
Its compatibility with relativity, quantum physics, thermodynamics and current observations makes it a serious speculative framework.

It remains partly speculative but offers a testable methodology and a unifying language for light-space-time tensions.

The reader may wish to refer to Appendix A to examine the concrete experimental means of validating the model.

Appendix A - VLCC method: differential photon mapping and falsifiability
- Vronsky Light Correlation Cartography -

Within the framework of the VLCC model, a falsifiable method of observation is proposed based on the correlation between photonic states and the local geometry of space-time. This approach would make it possible to put to the test the central postulate according to which light does not pass through space-time but reveals its very nature.

Theoretical basis

Principle: "Light does not traverse space-time: it reveals its nature".

The photonic structure of a cosmic region would reflect differential metric tensions (IPL/ITL) and local morphogenic memory (T_µ). Light thus becomes a tracer of variations in cosmic inertia, density and stability.

Measurable parameters

- Local photon intensity
- Emission spectrum and frequency continuity
- Polarisation and directional coherence
- Stability or variability over time

Typology of mappable zones

Observations would be interpreted according to the dynamic nature of the light field measured:

- Active zone: high intensity + stable spectrum → intense IPL/ITL dynamics
- Dormant zone: low intensity+ chaotic spectrum→ geometric freeze sphere
- Transitional zone: rapid fluctuations → metric shift, morphogenic instability

Expected correlations with other observations

- Gravitational lenses with no visible mass
- Anomalies in the cosmic microwave background (CMB)
- Apparent time shifts (slowing down, freezing of information)
- Invisible but active filaments observed in galactic networks

Principle of falsifiability

The method is falsifiable if no correlation is found between the measured photon state (spectrum, coherence, polarisation) and the local cosmic geometry or dynamics expected according to VLCC.

In other words:

- If regions of high IPL/ITL voltage show no differential luminous behaviour
- Or if luminous anomalies do not correspond to any VLCC metric contrast
→ metric contrast, then the model can be refuted experimentally.

Conclusion

Differential photon mapping offers an original and testable theoretical tool for VLCC. It directly links light, geometry and morphogenic memory, and is part of a scientific approach that is open to validation or invalidation.

Appendix B - Observational hypotheses: Glow Spheres in the cosmos

The VLCC model, by introducing the notion of Glow Spheres as an inverted phase of Freeze Spheres, offers a new reading of certain astrophysical phenomena that are still poorly understood. This appendix brings together the main observational hypotheses associated with Glow Spheres, suggesting indirect signatures already potentially detected in current data.

1. Energetic events potentially linked to Glow Spheres

• Gamma-ray bursts (GRBs) :

- Colossal gamma-ray emissions, sometimes without any visible source, could correspond to an explosive release of condensed light in a Glow Sphere in the process of being reactivated.

• Fermi bubbles:

- These giant gamma-ray structures at the galactic centre could be the remains of fossil Glow Spheres, evidence of ancient photonic activity that was frozen and then released.

• Fast radio flashes (FRBs):

- FRBs, extreme but brief light signals, could be due to imbalances in unstable Glow Spheres, releasing pulses with no visible optical counterpart.

2. Characteristic physical and observational signatures

Some common features could be indirect indicators of Glow Spheres:

- - Non-thermal spectra
- - Absence of associated visible mass
- - Isotropic or radial expansion
- - Repetitions not linked to a stellar cycle

3. Cosmological perspectives

If this hypothesis is correct, it would make it possible to unify certain explosive, mysterious and non-repetitive phenomena as stemming from the same class of photonic-gravitational transitions. Glow spheres would then become key astrophysical objects in the dynamic architecture of the VLCC.

Appendix C - Comparative evaluation of cosmological models Structural analysis, relativistic compatibility and comparative score

1. Aim of the section

In this section, we reassess the coherence of the VLCC model in the light of the latest updates, and compare it with the major cosmological models in use. The scoring is based on two main axes: mathematical compatibility and observational compatibility, via a Cosmological Compatibility Score (CCS).

2. Scoring methodology

Each model is scored out of 50 points: 25 points for mathematical compatibility and 25 points for observational compatibility.

- A. Mathematical criteria (25 pts)
- - Integratability in general relativity (covariance, RG, FLRW)
- - Coherent energy-impulse tensor
- - Potential numerical simulability
- - Defined Lagrangian formalism
- - Consistency of modified Friedmann equations
- B. Observational criteria (25 pts)

- - Galactic rotation curves
- - Gravitational lenses
- - CMB compatibility (spectrum, anisotropy)
- - Cosmic expansion data (supernovae)
- - Testable predictive capability (photon mapping, Glow Spheres)

3. Comparative table of cosmological models

Model	Friedmann	Covar.	Simul.	Lagr.	Rot.	Lent.	CMB	Exp.	Test.	Total
LCDM	5	5	5	5	5	5	5	5	4	49
MOND	3	3	2	4	2	5	1	1	3	27
TeVeS	4	4	4	4	4	5	3	3	3	38
Janus	3	4	3	3	3	4	3	2	3	31
VLCC (updated)	5	5	4	5	3	4	2	3	5	41

4. Discussion of the results

The updated VLCC model gains in mathematical robustness with an explicit Lagrangian formalism, validated modified Friedmann equations, and a well-defined differential tensor.

Observationally, there are still limitations with CMB and lenses, but advances in photon mapping (Appendix A) and Glow Spheres (Appendix B) significantly increase the predictive potential.

5. Conclusion

The VLCC model is now positioned as a serious speculative hypothesis, mathematically rigorous, and increasingly testable. It remains complementary to the ΛCDM model, but is gaining in scientific autonomy, particularly in the photothermal approach and differential time/matter predictions.

Total score: 41/50.

General conclusion

Throughout this collection, the VLCC model has proposed a new, radical and yet rigorously articulated view of the universe: that of a cosmos where light does not simply illuminate what is, but fabricates reality through tension, shifting, memory and plasticity.

By choosing to make light a structuring actor - not a passive or marginal one - this model questions the very foundations of classical and contemporary physics:

- What if dark matter was just an illusion of contracted time?

- What if the stability of the universe came not from gravity alone, but from the harmony of differential tensions between cold and hot zones?

- What if the metric itself, instead of being fixed, shifted and breathed?

The VLCC does not claim to be the end of the debate. It does not replace existing models: it sheds new light on them, injecting a dynamic in which photon intensity, thermal index and morphogenic memory become the new vectors of cosmic form.

Above all, he proposes a falsifiable framework:

- formalised equations

- a photonic mapping method

- and bridges to recent observations of the cosmos.

It would be unfair to end this collection without remembering that behind every hypothesis, every calculation, every curve proposed, there is also a deep intuition, sometimes coming from ordinary reality: a muddy bicycle wheel spinning fast, a childhood memory where boredom seems a moment of eternity and moments of joy an ephemeral instant, or the rear tyre of a motorbike sliding without being able to transfer its power...

These fragments of the sensitive perhaps nourish a new cosmology: relational, slippery, supple and resolutely luminous.

The VLCC is a work in progress. It is a model in the making, a language to be refined, a way of looking at things to be practised.

For those who take the time to enter it, the model offers a way of thinking about the universe through light, and light through relationships.

Sometimes fixed, often slippery, the universe is organised under the impulse of a time that has become matter, and a light that models. It is perhaps not a closed system, but the memory of the cosmos in motion, a photographic image of its architectural memory.

Glossary - Key notions of the VLCC model

VLCC (Vectors of Cosmic Curvature Light)

Differential cosmological model in which light (photons) plays an active role in structuring space-time by means of local photonic tensions.

LPI (Local Photon Index)

A measure of the differential density of photons in a given region. It acts as a curvature vector, influencing the shape and dynamics of space-time.

ITL (Local Thermal Index)

Local temperature gradient that, combined with the LTI, affects the morphological stability of a cosmic region.

T_μ (Morphogenic memory)

A differential field representing the local temporal memory of a structure: it expresses the way in which a cosmic configuration keeps track of its evolution.

Freeze Sphere

A frozen or almost inert zone characterised by a virtual absence of photonic movement. It acts as a reservoir of inertia and cosmic memory.

Glow Sphere

A configuration dense with condensed light. In certain observational hypotheses, it is associated with events such as gamma-ray bursts or Fermi bubbles.

Active time field

Hypothesis according to which time is not simply a passive dimension, but a fluid field with its own density, dynamics and morphogenic role.

Differential slip

Continuous fluid movement of cosmological configurations, without rupture or collapse, by local redistribution of IPL/ITL tensions.

Differential energy-impulse tensor (̃^{μν})

Modified tensor used in the VLCC model, incorporating light and temporal tension as active elements in the spacetime geometry.

VLCC Lagrangian (ℒ_{VLCC})

Speculative Lagrangian function defining the dynamic behaviour of the model, including photonic gradients, memory field and morphogenic potential.

Photonic mapping
Proposed methodology (Appendix A) for indirectly observing IPL gradients in the cosmos, and thus experimentally testing the VLCC model.

Differential cosmos
Vision of a universe in which structures are the product of sliding tensions, not of ruptures or hidden masses.