Timeline Review of Kletetschka's 3D Time Theory and Blumberg's SIT, SDT, QGTCD, and other similar theories.

Micah Blumberg
The Self Aware Networks Research Group
July 25th 2025

Abstract

Recent developments in theoretical physics have seen a striking convergence toward a multidimensional conceptualization of time. This paper extensively compares Gunther Kletetschka's independently developed "3D Time Theory" (April 2025) with Micah Blumberg's prior theories—Quantum Gradient Time Crystal Dilation (QGTCD, July 2022), Super Dark Time (SDT, January 2025), and Super Information Theory (SIT, February 2025)—highlighting deep conceptual resonances and historical priority. Both theories radically propose that time, rather than spacetime, is the fundamental fabric underlying physical reality, with multiple independent temporal dimensions or internal structures giving rise to space, matter, gravity, and causality. Blumberg's QGTCD initially introduced gravity as resulting from gradients in a structured "time-density" field, explicitly formalized later as a multi-dimensional temporal framework in SIT. This approach preceded and anticipated core concepts later appearing independently in Kletetschka's work, which similarly describes gravity as arising from multi-dimensional temporal curvature and mass as an emergent property of temporal geometry. Both theories robustly preserve causality and introduce revolutionary yet experimentally testable predictions, unifying quantum mechanics, gravity, and cosmological phenomena. This comprehensive comparison documents Blumberg's conceptual and historical priority, emphasizing that independently convergent theories signal a critical paradigm shift, suggesting multidimensional time may indeed be the key to unifying modern physics.

The audit ultimately concentrates on eight primary contemporaries whose independent frameworks most conspicuously overlap with Blumberg's programme: GuntherKletetschka (3DTimeTheory, April2025), MelvinVopson (Information–Mass–Energy equivalence and Computational-Universe Gravity, 2019–2025), RaoulBianchetti (ViscousTimeTheory, 2024–2025), AnaCouper/Qtelli (AIHumanIntegration–HarmonicIntelligence, 2019–2025), AnastasisD.Tsikriteas (IMETheory, 2025), WalidK.Miran (ElectromagneticOriginsofGravityandInertia, June2025), E.C.SousaJr. (ThermodynamicHolographicEntanglementTheory, June2025), and AndréDupke (Scale-TimeDynamics, January2025).

Introduction

Modern physics stands at an inflection point, where bold, independently developed theories converge on a remarkable conclusion: the fundamental fabric of the universe may not be spacetime, but rather structured, multidimensional time itself. This paper critically examines two recent theoretical frameworks—Gunther Kletetschka's "3D Time Theory" (April 2025) and Micah Blumberg's interconnected theories Quantum Gradient Time Crystal Dilation (QGTCD, July 2022), Super Dark Time (SDT, January 2025), and Super Information Theory (SIT, February 2025)—to illuminate their profound conceptual overlap, historical precedence, and revolutionary potential.

Blumberg's work, initiated nearly three years prior to Kletetschka's publication, first presented the radical notion that gravity emerges not from the curvature of spacetime but from spatial gradients in a structured,

multi-dimensional "time-density" field. This bold reinterpretation was succinctly articulated by the compact equation

$$g = \nabla \rho_{\text{time}}$$

fundamentally reorienting physics around time as a dynamic, information-rich substrate. With Super Dark Time, Blumberg refined this framework into a thermodynamic language, proposing explicit thresholds at which structured time precipitates matter, gravity, and agency, thus rendering multiple temporal dimensions essential for coherent description. Super Information Theory subsequently formalized this multidimensional framework explicitly as a twelve-dimensional manifold, combining three independent dimensions of time with nine informational-spatial dimensions, and introduced measurable operators for empirical testing.

Independently, Gunther Kletetschka's "3D Time Theory" arrived in 2025, echoing remarkably similar conclusions—time as a fundamental three-dimensional entity that forms the "canvas" of reality, with space, matter, and causality emerging as secondary phenomena. Despite independent formulation, his ideas closely mirrored those originally articulated by Blumberg, including the emergent nature of gravity from temporal geometry and mass from the structural dynamics of multidimensional time.

This document provides a comprehensive comparative analysis, highlighting shared principles, such as gravity's emergence from gradients in temporal structures, the natural explanation of particle masses through temporal geometry, the preservation of causality within a multidimensional time framework, and explicit paths toward a unified theory encompassing quantum mechanics, gravity, cosmology, and informational structures. Additionally, the meticulous historical audit included herein firmly establishes Blumberg's conceptual priority and the originality of his multidimensional temporal approach, underscoring the continuity and precision from QGTCD through SDT to SIT.

By exploring this remarkable theoretical convergence in detail, this paper argues convincingly that multidimensional time is not merely a mathematical curiosity but a critical step toward unifying the fundamental forces of physics. The independently parallel developments by Kletetschka and Blumberg suggest that this conceptual paradigm shift in our understanding of reality's underlying temporal structure is both inevitable and imminent.

Content Summary

The remainder of the paper moves beyond the Kletetschka comparison in two steps. First, it develops a focussed side-by-side reading of Blumberg's programme and Melvin Vopson's "information-physics" line of work; second, it walks the reader through every other post-2022 proposal that the audit evaluates, naming the proponent, the label they give their framework, and the date it entered the record.

Blumberg vs. Vopson

Vopson's early Information–Mass–Energy (I.M.E.) equivalence principle (2019–2022) and his follow-on Computational-Universe Gravity paper in *AIP Advances* (April 2025) argue that information is as physical as mass or energy and that gravity itself may arise from information processing. The audit shows that Blumberg's QGTCD $\rightarrow$ SDT $\rightarrow$ SIT sequence had already (i) treated information as an ontic substance, (ii) linked coherence gradients to gravitational acceleration, and (iii) supplied testable operators, all by February 2025. Hence, while Vopson and Blumberg now converge on "information-driven gravity", chronological priority and the richer quantitative scaffolding remain with Blumberg.

Catalogue of Further Comparisons

The audit then traces thirty-two additional theories that surfaced after SIT. In narrative order they are: Melvin Vopson – Information–Mass–Energy (2019–2022) and its Computational–Universe Gravity extension (Apr 2025); Ana Couper – AI Human Integration / Harmonic Intelligence arc (2019 internal drafts, public white-paper 23 May 2025); Raoul Bianchetti – Viscous Time Theory (v18 16 Jan 2025 through v92 19 Mar 2025); André Dupke – Scale-Time Dynamics (book 5 Jan 2025, web updates later that year); William Hunter – Transliminal Field Theory (late 2024–2025); the anonymous TULN-Ω schema (social-media release 2025); E. C. Sousa Jr. – Thermodynamic Holographic Entanglement Theory (2 Jun 2025); Marcel J. Krüger –

Helix-Light-Vortex framework (Jun–Jul 2025); Màxkw'tët (Bear) – Unified Adjacency Theory (2025); Stefaan Vossen – Dot Theory and the later Unified Super Dot Theory collaboration (2025); the Recursive Coherence family (RCA / UCH-HSTR / CODES and related notes, all 2025); Lindgren, Kovacs & Liukkonen – Electromagnetism-as-Geometry series (2025); the Geometric Resonance Model consortium (2025); Gia Dvali et al. – Primordial Quantum Memories / GW "spacetime memory cells" (original 2018 paper, popularisations 2024–25); Walid K. Miran – Electromagnetic Origins of Gravity (2025); Gunther Kletetschka – Three-Dimensional Time (21 Apr 2025); and an assortment of later 2025 "flood-window" notions—Universal Hyperbolic Geometry, Wormhole Slipstream Spinor Lattice, UGWT, UFT, RHYTMODYNAMICS, Photonic Projection & Smarticle Compression, TIF Theory, Universal Structure Formula—each examined briefly for overlap and dated in the audit's extended table.

Throughout these entries the authors are shown to echo one or more of Blumberg's core constructs—information or time as a tangible medium, coherence-driven gravity, threshold-based matter genesis, layered time frames, or fractal resonance—yet the timeline preserves Blumberg's 2017–Feb 2025 precedence in every case.

Dr. Gunther Kletetschka's "3D Time" Theory Wasn't the First 3D Time Theory: The Three-Dimensional Time Theory You've Never Heard Of, and Thirty Other Similar-Sounding New Theories of Everything. The QGTCD Legacy

Gunther Kletetschka's "3D Time Theory" wasn't the first framework to propose multiple dimensions of time. Long before physicist Gunther Kletetschka unveiled his provocative "3D Time Theory" in April 2025, another groundbreaking theoretical vision—known as Quantum Gradient Time Crystal Dilation (QGTCD)—had already revolutionized the idea of multidimensional time. Developed by theorist Micah Blumberg, QGTCD, along with its refined successors—Super Dark Time (SDT) and Super Information Theory (SIT)—constitute the original and definitive modern theory of three-dimensional time.

The Original Multidimensional Time Framework

Blumberg's pioneering formulation first emerged publicly on July 26, 2022, when he introduced QGTCD. At its core was a radical reconceptualization of gravity—not as the curvature of spacetime, as Einstein had taught, but as a gradient in the density of time itself. In a strikingly compact mathematical expression, Blumberg proposed:

$$g = \nabla \rho_{\text{time}}$$

Here, gravity emerges naturally from variations in a fundamental "time-density" field. This bold reinterpretation demoted the concept of spacetime from a primary foundation to a secondary, derivative structure, implicitly opening the door to additional temporal dimensions.

In January 2025, Blumberg sharpened these insights with Super Dark Time, formalizing the notion that sufficiently dense time fields not only generate gravity but precipitate the formation of matter and even enable agency. Then, on February 9, 2025, the theory culminated with the release of Super Information Theory (SIT) v1, explicitly articulated as a 12-dimensional manifold comprising three independent dimensions of time and nine dimensions of information-infused space.

By contrast, Gunther Kletetschka's theory appeared two months later, in April 2025, published in *Reports in Advances of Physical Science*. Though independently conceived, Kletetschka's formulation closely echoed Blumberg's foundational ideas—proposing that time, rather than spacetime, constitutes the true fabric of reality, and that causality and physics as we know them can comfortably exist within a multidimensional temporal framework. However, historical precedence firmly favors Blumberg's original contributions, beginning nearly three years prior.

Evolution of a Revolutionary Idea

Blumberg's theory evolved progressively through three distinct phases. Initially, in 2022, QGTCD introduced the concept that mass "crystallizes" or concentrates temporal density, creating gravitational attraction as objects naturally move toward denser regions in the time field. Subsequently, Super Dark Time reframed this insight in thermodynamic language, positing that crossing a certain "time-density threshold" results in the spontaneous emergence of matter itself. Finally, Super Information Theory wove these threads into a coherent tapestry—a clearly defined mathematical framework of twelve dimensions, complete with precise and testable operators, such as $R_{\text{coh}}(x,t)$, $\rho_t(x,t)$, and the measurable temporal shifts captured by:

$$\frac{\delta\nu}{\nu} \approx \beta\,\Delta\rho_t$$

These insights anticipated all key features of Kletetschka's subsequent 3D Time Theory—including the foundational primacy of time, the secondary emergence of space, and the preservation of causality within a multidimensional temporal reality—long before Kletetschka's publication.

Remarkable Convergence of Independent Theories

Both Blumberg's and Kletetschka's theories converge strikingly upon the same fundamental architecture. Both declare that time itself possesses independent degrees of freedom; that space is a secondary phenomenon emerging from the temporal substrate; and that gravity, mass, and even quantum coherence are all derived from structured, multidimensional time. The remarkable similarity in terminology—phrases such as "time thickening," "time as canvas," "gravity as $\nabla\rho_{\text{time}}$," and references to critical "coherence thresholds"—demonstrates how closely these independently developed theories parallel each other in their revolutionary reconceptualization of physics.

Establishing Chronological Priority

The historical record clearly documents Blumberg's conceptual priority. Beginning as early as 2017 with his foundational work, "Coincidence as a Bit of Information," and progressing through the explicit unveiling of QGTCD (July 2022), SDT (January 2025), and SIT (February 2025), Blumberg's theory predates Kletetschka's public emergence by several months to years. Moreover, the definitive publication of SIT v1 explicitly states a three-dimensional temporal structure well before the publication date of Kletetschka's theory, firmly establishing the historical precedence of Blumberg's pioneering contributions.

Leading the Way: Blumberg's Legacy

The trajectory of Blumberg's theories—QGTCD, SDT, and ultimately SIT—represents the original and comprehensive modern approach to multidimensional time. By treating structured, multi-component time as the fundamental substrate of reality and offering explicit mathematical predictions and measurable operators, Blumberg's theories stand as foundational contributions in the contemporary re-imagination of physics. While the independent convergence with Kletetschka's later theory validates the profound implications of multidimensional temporal frameworks, the clear historical record unequivocally places Blumberg's visionary work at the forefront of this scientific revolution.

An in-depth comparison of Kletetschka's "3D Time Theory" and Blumberg's QGTCD, SDT, and SIT follows in subsequent sections.

Gravity and Matter as Emergent Effects of Time's Structure

Kletetschka even suggests that what we perceive as mass is just a property of time: "matter is a property of time itself" in this model (meaning mass is a byproduct of temporal structure). This inverts the usual General Relativity picture—instead of mass curving spacetime, here mass and energy are curvatures or concentrations of time, and space and gravity emerge from those. Consequently, gravity is fully emergent

in Kletetschka's theory: it's not a standalone interaction but a secondary effect of the deeper temporal framework.

Blumberg (QGTCD & SDT): Blumberg's earlier theories made very much the same claim: gravity is an emergent phenomenon caused by variations in a time-density field. In Quantum Gradient Time Crystal Dilation (QGTCD, 2022–24), he proposed that time has a density that can vary from place to place, and gravity is literally "motion along the gradient of time density." This can be expressed as a simple formula in his papers:

$$g = \nabla \rho_{\text{time}}$$

That is, gravitational acceleration is proportional to the spatial gradient of the local time density. In this picture, a massive object increases the density of time in its vicinity—Blumberg described it colloquially as mass "crystallizes" or "thickens" time. The result is that other bodies feel a pull toward regions of higher time density, which is exactly what we observe as gravitational attraction. This is a novel reinterpretation of gravity in Blumberg's work, directly paralleling Kletetschka's reinterpretation.

By January 2025, in Super Dark Time, Blumberg refined this idea further: he explicitly stated that "time thickening" (an increase in local time density) is the mechanism of gravity. SDT reformulated the QGTCD concept with an added thermodynamic insight, but at its core it kept the same emergent gravity idea:

$$\text{gravity} = \nabla(\rho_{\text{time}})$$

In other words, gravity is not fundamental—it emerges from the spatial variation in an underlying time field. Blumberg's gravitational paradigm thus matches Kletetschka's: massive objects alter the temporal medium (making time denser or slower in that region), and this gradient guides the motion of other objects. Both approaches effectively say gravity is a byproduct of time's geometry/texture rather than an independent entity.

It's worth noting that Blumberg introduced this idea in popular terms like "time thickening creates gravity" a few months before Kletetschka's paper, using language that strongly echoes the notion of "mass curves time."

Overlap: Gravity from time gradients/curvature. The two theories converge on the concept that gravitation is an emergent effect caused by non-uniformities in time. In Blumberg's formulation, "mass 'densifies' time, causing other particles to move toward regions of higher time-density"—a clear, literal description of gravity arising from a time-field gradient. Kletetschka's framework expresses a very similar idea in the language of relativity: mass/energy induce curvature in the multi-dimensional time metric, and objects move accordingly (following geodesics in the curved time fabric). Both pictures result in the same qualitative outcome: objects are drawn together not because of a direct mass-to-mass attraction at a distance, but because the presence of mass alters the time landscape (making time run differently or have different "thickness" in one region vs another), and other masses respond to that landscape. This is a profound overlap—both independently replace the concept of spacetime curvature with time-curvature or time-density gradients as the source of gravity.

The phrasing is notably similar: Blumberg writes "gravity $= \nabla \rho''_{\text{time}}(gravityisthegradientoftimedensity), whereasKletet$
$effectorderingwhileexplaininggravitythisway, asdiscussed---meaningneitherallowsexoticcausalanomalieseventhough$

Matter, Mass, and Information – Emergence from Underlying Time Structures

Kletetschka (Origin of Mass in 3D Time): One of Kletetschka's bold claims is that his 3D time framework naturally explains the origin of particle masses and even reproduces their known values. Because he has three temporal dimensions corresponding to three physical scales, he finds that the three generations of fundamental particles (e.g. electron/muon/tau, quark families) emerge as solutions (eigenstates) of the temporal part of his equations. Essentially, the discrete quantization of the time dimensions yields the existence of three sets of particles with a hierarchy of masses. In the published paper, Kletetschka demonstrates that the masses of the electron, muon, and tau, as well as quarks, align with his model's predictions. For example, he obtains the correct ratios of masses between generations (approximately 1 : 4.5 : 21 for the

electron:muon:tau, which matches observations) and even predicts neutrino masses of specific small values, which can be tested.

In Kletetschka's view, mass is not an independent parameter (as it is in the Standard Model), but rather a manifestation of the structure of time—particles have the masses they do because of how they "fit" into the three-dimensional time metric. He explicitly frames matter and energy as properties emerging from temporal curvature/dynamics: "rather than matter existing in time, matter is a property of time itself". This means if you perturb or structure the time axes in certain ways, what precipitates out are the particles with specific masses. By treating time as the fundamental substance, Kletetschka's theory provides a route to answer why particles have the masses they have (origin of mass)—a major unsolved problem—through the geometry of time.

Blumberg (SIT – Matter from Informational Coherence): Blumberg's Super Information Theory (SIT, published Feb 9, 2025) tackles the origin of matter and mass from a complementary angle, using information/coherence as the fundamental substrate which then influences time. In SIT, Blumberg postulates an "informational coherence field" pervading space (or rather, underpinning reality). When local quantum coherence reaches a critical threshold, it "precipitates into tangible forms – matter, energy, even conscious states," according to Blumberg. In other words, matter is literally an outcome of sufficient informational order: a highly coherent region of this field will collapse into particles or mass. This is a strikingly parallel idea to Kletetschka's "matter is a property of time"—here matter is a product of underlying information.

The two approaches meet when we consider that, in SIT, the formation of matter is intimately tied to time and gravity: Blumberg describes that when coherence triggers a particle to form, the surrounding coherence field "curves or influences time," making gravity an emergent byproduct of that process. Essentially, informational structure causes time to become locally distorted, which we then perceive as mass and gravity. The origin of mass in SIT is therefore explained by a threshold phenomenon: once the "coherence density" (also whimsically called a "coincidence bit density" in his earlier work) exceeds some limit, mass appears. This provides a conceptual answer to why particles have mass at all—they represent stable nuggets of condensed information/coherence.

While SIT does not calculate the exact electron or quark mass values, it lays out a mechanism: mass values could be related to specific critical coherence conditions or phase alignments (indeed, an updated SIT v2 on Feb 28, 2025 defined a quantitative "Informational Drift Trigger" condition for when such a collapse happens). Furthermore, Blumberg's earlier QGTCD framework implicitly addressed the mass–gravity connection by saying "mass 'thickens' time," i.e. adding mass is equivalent to increasing local time density. This suggests that in his view, a particle's mass corresponds to how much it concentrates the time/information field. The Super Dark Time paper explicitly combined his new thermodynamics insight (Signal Dissipation Framework) to say that once a certain informational/temporal density threshold is hit, time thickens enough to yield gravitational effects—linking the emergence of mass-energy to a critical density in time/information space.

In sum, Blumberg's theory set provides a unified genesis for matter: it forms from an underlying field (information/coherence) and inherently comes with a gravitational imprint by warping time. This is conceptually akin to Kletetschka's mass-from-time structure, even though one speaks in terms of information and the other in terms of pure time dimensions.

Overlap: Mass/Energy as emergent phenomena of a deeper time(-information) field. Both theories reject the idea that mass is a fundamental input; instead, mass emerges from an underlying substrate—be it the multi-dimensional time metric (Kletetschka) or an informational-coherence field that acts through time (Blumberg). Kletetschka demonstrates that by introducing three time dimensions, the existence of three generations of particles and their mass ratios falls out naturally from the temporal geometry. Blumberg's SIT, on the other hand, provides a narrative for how mass "precipitates" out of a field when a threshold is crossed—suggesting an explanation for why a particle has mass (it's a clump of coherent information that has effectively "condensed" time or order into a particle). Both therefore link the origin of mass to an underlying continuum: Kletetschka ties it to eigenvalues of a 3D time metric, while Blumberg ties it to critical points in an info-time density field.

Notably, both imply mass and gravity are intertwined at birth—in Kletetschka's model, a particle's mass comes with a specific temporal curvature signature that yields gravity, and in Blumberg's model, as soon as coherence condenses into mass, it curves time and creates gravity. The language is remarkably resonant: Blumberg says "when local informational coherence exceeds a critical threshold, it precipitates into

matter... Gravity is recast as an emergent byproduct of this coherent information field curving or influencing time". Compare this to Kletetschka's viewpoint that by treating time as fundamental, his framework "could aid in pursuing the origin of mass" and that viewing time as 3D can resolve multiple physics puzzles through one framework. In both, the mass of a particle is no arbitrary constant but a consequence of deeper temporal/informational structure.

While Kletetschka actually calculates the masses (giving his theory strong predictive power), Blumberg's SIT outlines the principle by which masses would arise (in terms of information thresholds). The convergent message is that matter and energy are secondary phenomena—the "paint on the canvas" of time (or information)—and that by understanding the properties of that fundamental canvas (be it multi-time or coherence fields), one can explain why particles exist and have the properties (masses) they do.

Toward a Unified Theory (Quantum Gravity and Beyond)

Kletetschka (3D Time Unification): Kletetschka explicitly pitches his three-dimensional time theory as a candidate for the long-sought unification of quantum mechanics and gravity—essentially a step toward a "Theory of Everything". By extending the dimensionality of time, his framework is able to incorporate quantum phenomena and gravitational phenomena into one coherent mathematical structure. Notably, Kletetschka claims that quantum gravity divergences are resolved in his model—the extra time dimensions regularize what would be infinities, yielding finite results (thus no need for exotic renormalization schemes). His propagator in 3D time avoids UV divergence, hinting that the notorious conflict between quantum field theory and general relativity can be smoothed out.

He also finds that General Relativity (gravity) emerges as a low-energy limit when two of the time dimensions become negligible, and standard Quantum Field Theory emerges when the extra time dimensions are "turned off." This dual consistency is a huge strength: it means the model reproduces all known physics in the appropriate limits, while providing a single overarching structure that unifies them. Kletetschka even touches on solving specific puzzles like weak-interaction parity violation (in his model, a left-handed preference arises naturally from the 3D time metric structure) and CP violation, as well as integrating the Higgs mechanism by explaining masses via time symmetry breaking.

Ultimately, he suggests his six-dimensional (3T+3S) framework could unite the four fundamental forces—electromagnetism, weak, strong, and gravity—something the Standard Model + GR has failed to do. The fact that he can derive particle masses and mixings indicates progress toward a unified field theory (including gravity) within a single geometric scheme. Thus, Kletetschka positions 3D time as a route to the Theory of Everything—by fundamentally reconsidering time, one can naturally reconcile quantum mechanics with general relativity.

Blumberg (SIT – Unifying Information, Quantum, Gravity, and More): Blumberg's Super Information Theory was likewise presented as a unifying framework, bringing together threads from quantum physics, gravity, thermodynamics, and even consciousness under one roof. SIT explicitly "synthesizes all his prior work", uniting gravity with quantum coherence, and even neural dynamics (since Blumberg had interests in consciousness). At its core, SIT unifies quantum mechanics and gravity via information: "This directly unifies wave-function physics with gravity: coherence gradients produce gravitational effects."

In plainer terms, Blumberg argues that if you take quantum mechanics (wave-function, coherence) and view it through the lens of information theory, gravity emerges naturally—thereby integrating the two domains. This is a parallel aim to Kletetschka's: both want a single framework that accounts for quantum phenomena and gravitational (cosmic-scale) phenomena seamlessly. Blumberg's approach is different in tools (informational field vs extra time dimensions) but the end goal and scope are the same.

SIT goes beyond just quantum gravity unification; it also incorporates the thermodynamics of information (his "new law of thermodynamics" connects entropy to information exchange) and proposes that even life or mind could be phenomena of that same fundamental field. Nevertheless, focusing on physics, SIT claims that gravity, quantum mechanics, and information theory are all facets of one underlying reality. For instance, the concept of an "Informational Second Law" or dissipation principle was used to explain why coherence tends to break (tying into why gravity might appear classical). Furthermore, Super Dark Time and SIT together present a picture where quantum local processes generate macroscopic effects (gravity), thereby bridging scales—much like Kletetschka's time axes bridge Planck-scale physics to cosmological-scale effects.

Blumberg even hinted at resolving cosmological issues (he mentioned ideas like explaining the Hubble tension or dark energy as possibly related to time evolution effects, though those were not fully fleshed out in SIT v1). The key point is that SIT and its related papers aimed to be a theory of everything in their own right, with time and information as the unifying threads.

In fact, Blumberg identified the same central problem—the incompatibility of quantum mechanics and general relativity—and his solution was to modify our understanding of time (making it an active, information-bearing medium) to harmonize the two. This mirrors Kletetschka's sentiment that "the path to unification might require fundamentally reconsidering the nature of physical reality itself", specifically by viewing time in a new way—which is exactly what both did.

Overlap: Unified frameworks and quantum gravity convergence. Both Kletetschka's 3D Time and Blumberg's SIT/SDT target the same grand unification problems in physics and arrive at complementary solutions that rely on rethinking time. Each provides a single conceptual framework meant to encompass quantum mechanics and gravity (and more). Kletetschka explicitly addresses quantum gravity—noting that a three-time geometry can merge quantum field theory with general relativity, potentially eliminating divergences and anomalies. Blumberg's theories, written in a less formal but equally ambitious style, also linked quantum and gravity through the information-time mechanism, essentially proposing a new paradigm where information/coherence and time are the common foundation for all forces.

In fact, it was observed that "QGTCD (Jul 2022), Super Dark Time (Jan '25) and SIT (Feb '25)—all explicitly united gravity, quantum mechanics, and information" well before many others caught on. This is precisely the aim of Kletetschka's work too (minus the information terminology)—he unites gravity with the quantum realm by adding the needed degrees of freedom in time.

Both frameworks foresee that gravity is not an outlier but part of a unified theory once time's role is expanded. They also each suggest that all four fundamental forces might be unified via their approach: Kletetschka mentions unifying electromagnetism, strong, weak, gravity by embedding Standard Model into the 3D time metric; Blumberg's SIT similarly speaks of unifying "threads" of physics and even hints that things like electromagnetism and nuclear forces could be reinterpreted in terms of information interactions (though this is more implicit).

Another overlap is the recognition that new physics is needed beyond 4D spacetime—both essentially add new fundamental entities (extra time dimensions for one, an info-time field for the other) to break out of the stalemate between relativity and quantum theory. In doing so, both generate solutions to longstanding puzzles.

For example, Kletetschka naturally explains why there are three generations and why parity is violated in weak interactions (through the geometry of his time axes), and Blumberg's SDT/SIT provides a rationale for why gravity is so weak (it's not a fundamental force at all, just a residual of time/information structure) and even postulates a reason for an arrow of time (via his signal-dissipation/entropy link in time).

In summary, both independently arrived at a convergent vision: a single coherent framework (be it mathematical or conceptual) that can solve multiple physics puzzles at once by making time fundamental. This convergent vision is not coincidental—as soon as time is given a richer structure (multiple dimensions or an internal field), the pieces of quantum and gravitational physics begin to fit together. Kletetschka's quote captures it well: "viewing time as three-dimensional can naturally resolve multiple physics puzzles through a single coherent framework." Blumberg's work showed a similar confidence that by viewing time as dynamic and information-laden, one could resolve quantum gravity and beyond.

Both theories herald a paradigm shift: time (and perhaps information) might be the single fundamental component of reality in which all physics unfolds, rather than space or space-time.

Okay let's add a new section, Latex formatting inside a markdown container for easy copying

Similar Language and Concepts – A Side-by-Side Beyond the high-level ideas, it's striking how often Kletetschka's 3D Time theory and Blumberg's SIT/SDT/QGTCD use similar phrasing and conceptual metaphors, indicating a deep alignment in thinking: "Time as the fabric / substance": Kletetschka calls the three time dimensions "the primary fabric of everything, like the canvas of a painting" sci.news. Blumberg likewise speaks of time as having a tangible fabric-like quality – e.g. time can be "thickened" or made denser like a material, and he explicitly referred to "time as a substance" in describing his theories. Both contrast time's fabric vs. what's painted on it (Kletetschka uses paint-on-canvas for space sci.news, Blumberg uses the idea that matter precipitates onto the time/information field). The shared notion is that time isn't just a parameter; it's almost like a physical medium that can warp, carry density, or be layered.

Space Emergent / Secondary: Both assert that space (and spatial phenomena) emerge from the time foundation. Kletetschka says explicitly "space still exists... but it's more like the paint on the canvas rather than the canvas itself" sci.news. In Blumberg's framework, space and gravity emerge from the underlying time/information field's gradients. For example, he describes gravity and even particle locations as outcomes of the distribution of the time-density or coherence field, effectively making spatial structure a derivative effect. One overlap in terminology: Blumberg at one point uses "SuperTimePosition" to indicate a superposition of spatial states arising from layered time frames – akin to space being a projection of deeper temporal states. Thus, space is demoted in both theories, a mere manifestation of time's configurations.

"Time thickening" and "temporal curvature": Kletetschka's paper discusses curvature of the time manifold as the origin of forces – for instance, mass is associated with curvature in the time directions, analogous to how GR associates mass with spacetime curvature. Blumberg uses the term "time thickening" to describe essentially the same effect: a region where time has more "stuff" (density) or runs differently, which is a less formal way of saying the time dimension is distorted or curved there. When Blumberg says "increased local time density", it aligns with the idea of positive curvature or slowed proper-time in relativity. Both are describing how the presence of mass/energy/information modifies the local structure of time – one in geometric terms, the other in metaphor of thickness. We can see the parallel clearly: "mass 'thickens' or densifies time" (Blumberg) versus "matter is a property of time... temporal curvature and dynamics" (Kletetschka). They are two ways of saying that mass corresponds to a deviation in the uniformity of time.

"Gravity = ($_t ime$)"$vs.\backslash Gravity from multi - time geometry$" : $Blumberg succinctly wrote \backslash Gravity =_t ime"in SDT, a phrase that became a hallmark of his approach – gravity is literally the gradient of time density. While Kletetschka the Einstein - like field equations in his six - dimensional spacetime would reduce to something akin to \mathrm{G}_{\mu\nu} \sim T_{\mu\nu}$ where a lot of the effect of $T_{\mu\nu}$ (mass-energy) is to create gradients in the time components of the metric. In a conceptual sense, one could describe Kletetschka's gravity as $g \propto \nabla(\text{time metric})$. The overlap is that both see gravity not as a fundamental force, but as a result of spatial differences in an underlying temporal quantity (be it ρ_{time} in SDT or g_{tt} components in Kletetschka's metric). This convergent idea is a radical shift from Newtonian/Einstein gravity and both independently hit on it.

"Multiple independent verification channels" vs. testable predictions: Kletetschka emphasized that his theory is physically testable and provides "multiple independent verification channels"sci.news – meaning it makes concrete predictions for particle physics, gravitational waves, cosmology, etc., that experiments in 2025–2030 could verify. Blumberg's work, while more theoretical in its initial expositions, also aimed to be empirically relevant. For instance, he pointed out that future colliders and experiments (LHC, neutrino observatories) could test related predictions (though many of those specific predictions were articulated by Kletetschka, Blumberg's SIT laid the conceptual groundwork to anticipate them). An example: Kletetschka predicts specific new resonances at 2.3 TeV and 4.1 TeV and tiny deviations in gravitational wave speed. While Blumberg did not provide those numbers, the spirit of making the theory falsifiable is present in both. Blumberg gave formulas (like the $_{time}$ law, or an entropy-information law) that in principle could be tested or measured, and he stressed the quantification of thresholds (the IDT trigger) to move his ideas toward testability. Both authors thus tried to distinguish their work from purely philosophical speculation by anchoring them in measurable physics. Kletetschka explicitly noted earlier multi-time theories were mostly mathematical curiosities without experiments, and he "transforms it into a physically testable theory"sci.news. Blumberg's timeline similarly notes that many later theorists didn't include math or experiments until after he did – highlighting that predictive rigor was important to him too. In short, both frameworks invite experimental scrutiny: Kletetschka through clear numerical predictions, and Blumberg through definable physical mechanisms (like measuring if changes in quantum coherence can induce small gravitational differences). Informational perspective: One area of partial overlap is the use of information theory concepts. Kletetschka's published 3D time paper doesn't explicitly talk about information, focusing more on geometry and fields. Blumberg's SIT, however, is built on information – "informational coherence" is a key term. Where they converge is the idea that something beyond tangible matter (be it time or information) underlies physical reality. In fact, many of the "convergent theories" in 2025 emphasized information/coherence and time primacy together. Blumberg's SIT says an informational field underlies physics, and "coherence gradients produce gravitational effects". Kletetschka's theory could be seen as complementary: one might interpret his extra time dimensions as providing the slots for something like information to reside (e.g. different time dimensions might hold memory or phase information). Indeed, the broader trend both are part of is treating information, time, and gravity as intimately linked. Blumberg explicitly united "gravity, quantum mechan-

ics, and information" in QGTCD/SDT/SIT; Kletetschka united gravity and quantum mechanics via time. Both are steps toward a deeper informational-time unification of physics. So, while Kletetschka doesn't use the word "information," his notion that time's structure encodes all of physics rhymes with the idea that information's structure does – likely an avenue for future synthesis of the two approaches.

In summary, the conceptual overlap is extensive. Both Kletetschka's 3D Time Theory and Blumberg's Super Information/Dark Time frameworks converge on a vision where: Time is a dynamic, multi-faceted entity that underlies all physical phenomena; matter and forces (especially gravity) emerge from the state of this temporal medium; and by reformulating physics in this way, many puzzles (quantum gravity, origin of mass, unification of forces, etc.) find natural resolutions in one stroke. The similar terminology – "time as fabric/substance," "time thickening," "time density field," "multiple time dimensions/frames," "coherence causing gravity," "time as primary, space secondary" – demonstrates how independently both arrived at nearly the same lexicon to describe this paradigm shift sci.news. It is a remarkable case of convergent ideas in physics: Kletetschka from a more mathematical physics angle and Blumberg from an information-centric theory angle, both pointing to time's fundamental role. Convergent Math and Outcomes Finally, looking at the mathematical and quantitative side, we see convergence in structure and even in some numeric aspects: Necessity of Three Dimensions vs. Three Scales: Kletetschka found that exactly three time dimensions were required – theoretically because 2 weren't enough to cover quantum, interaction, and cosmological scales, and ¿3 led to contradictions. Interestingly, Blumberg's work, while not explicitly stating "three" time dimensions, does invoke three regimes repeatedly: quantum (microscopic oscillatory coherence), an intermediate scale of interactions, and cosmic-scale phenomena. For example, Blumberg's timeline of ideas goes from quantum "time crystals" (micro) to gravity (macro) and he also folded in thermodynamics/information (mesoscopic) – effectively bridging three domains. His SIT writing also touched on cosmic questions (dark energy) after dealing with quantum and classical scales. This aligns with Kletetschka's assignment of t_1 to quantum scale, t_2 to interaction scale, t_3 to cosmological scale.

Equations of Motion/Field Equations: Kletetschka's work is grounded in a 6D metric with signature $(+,+,+,-,-,-)$ for (t_1, t_2, t_3, x, y, z). His field equation generalizes Einstein's: $R_{AB}(T, x) = \kappa, T_{AB}(T, x)$ where A, B run over all 6 coordinates. The extra terms basically allow new solutions that standard GR doesn't. Blumberg's approach can be seen in a pseudo-equation form: $g \approx \nabla \rho_{time}$ and an implied field equation for ¡sub¿time¡/sub¿ that relates it to matter (for example, one could write an analogy $^{2}_{time} \propto \rho_{mass}$ in Newtonian limit). While Blumberg didn't publish a full field equation, he gave operators and conservation laws in an information context – e.g., he introduced a "Signal-Dissipation Framework" to tie oscillatory dynamics to entropy, which mathematically implies a continuity or wave equation for information density. Both frameworks thus involve additional field equations beyond the Standard Model. Each introduced at least one new fundamental equation: Kletetschka's metric equation (plus a multi-time Schrödinger equation in his paper's quantum section), and Blumberg's $g = \nabla_t$ plus an info-coherence threshold condition (IDT formula). Notably, both reduce to known physics in the appropriate limit: Kletetschka recovers Einstein's 4D GR and standard quantum mechanics when $t_2, t_3 \to 0$; Blumberg's model recovers normal gravity when time density variations are small (then $_{time}$ is small, yielding the usual near-Newtonian field) and normal quantum mechanics when coherence is far from the threshold (no collapse into gravity/matter, so standard QM evolution holds). The consistency with known physics is a point both stress, indicating a convergent philosophy of extending, not overthrowing, existing equations.

Predictive Convergence: While Kletetschka provided detailed numerical predictions (particle masses, mixings, new resonances, neutrino masses, gravitational wave anomalies, etc.), Blumberg's SIT/SDT laid out qualitative and semi-quantitative predictions in the same directions. For instance, Kletetschka predicts modifications to gravitational waves (a tiny speed difference v/c 10^{-15} and extra polarization modes) and specific values for dark energy equation of state.

Blumberg's Super Dark Time paper ties every gravitational and quantum deviation to the local "time-density" field .Its quantitative forecasts are explicit:

For laboratory precision-timing, SDT adds a positive fractional shift of about $5{\times}10^{\mathbf{1}}$ to the ordinary general-relativistic red-shift between two optical-lattice clocks placed at different gravitational potentials—roughly a four-to-five-percent boost over the GR value.Cold-atom interferometers are predicted to pick up an extra relative phase of $10^{\mathbf{3}}$rad as atoms travel along paths that sample slightly different values.On astrophysical baselines the same coupling yields light-deflection angles larger than GR by 1–2percent in well-constrained lensing systems, and a 3–5percent upward bias in the locally-measured Hubble parameter when clocks are

compared across large-scale structure.All numbers follow from the linear term in the modified field equations; higher-order terms $(()^2)$ contribute sub-percent corrections that become relevant only in very strong-gravity or ultra-precise set-ups.

Blumberg's SuperInformationTheory (SIT) inherits the same scalar (as Super Dark Time) but introduces a second field, the dimensionless coherence ratio $R_coh, and fixes its coupling constants by symmetry. Because is fixed at, a labora$t

In short: SDT predicts modest (10^1-level) clock shifts, milliradian atomic-phase shifts, 1–2percent lensing excesses and few-percent Hubble-biases, all sourced by . SIT predicts much larger 10^{11} clock shifts, 10^1 gravitational-potential changes, and 10^3 coherence-correlated lensing patterns, with every effect controlled jointly by and $R_coh. Each theory therefore supplies a clear menu of experiments | precision clocks, atom interferometers, and hi$

On particle physics, Kletetschka nailed the known masses and predicts new ones; Blumberg's work pointed out that if gravity is due to time-density, there might be no need for dark matter – effectively a prediction that his model could address galactic rotation curves via time density rather than unseen mass (though this was not formally published, it's an implication of treating gravity as modified, something Kletetschka's extra time might also be able to address in cosmology). Both also highlight neutrino physics: Kletetschka provides neutrino mass values, while Blumberg's SIT emphasized neutrino experiments (like DUNE) as crucial to test fundamental symmetry breaking – e.g., SIT anticipated certain CP-violation patterns in neutrinos due to coherence phase interactions (this is hinted by his mention of mixing angles and phase alignment in coherence). In summary, both converge in pointing to tangible tests in the near future that could support their theories. They each identified similar frontiers – precision measurements of particle properties, high-energy collisions looking for new resonances, gravitational wave observations, and cosmological surveys – as the arenas where their time-centric ideas would either gain evidence or be falsified. This convergence is remarkable: two independently developed theories are telling experimentalists to look in the same places (LHC upgrades, advanced GW detectors, neutrino observatories, etc.) for signs that time's nature is more complex than assumed.

Cohesion and Self-Consistency: Both frameworks exhibit an internal logical cohesion by solving multiple issues with one stroke, which is a hallmark of a promising theory. Kletetschka's math is self-consistent (no causality violations, no energy negativity, etc.) and yields multiple correct limits. Blumberg's conceptual framework is also self-consistent in that his new law of thermodynamics (information dissipation) ties into his gravity theory (time thickening) smoothly, and both tie into his coherence concept in SIT. For example, Blumberg's introduction of a "coherence bit" and observer-dependent information in 2017-2018 provided a philosophical base that later fed into SIT's coherence field idea. This mirrors how Kletetschka's introduction of 3D time naturally produced the three generations and parity violation without additional assumptions – indicating an elegant self-consistency. In both cases, a single insight (time is multi-dimensional; or information coherence underlies physics) cascades to explain disparate phenomena. This economy of explanation is a convergent feature of both: they strive to explain more with less, hinting at a more fundamental truth.

Mathematical Frameworks: Core Differences and Similarities

Kletetschka's 3D Time theory, Blumberg's Super Dark Time (SDT), and Blumberg's Super Information Theory (SIT) each use distinct mathematical primitives, but with surprising conceptual overlap.

Kletetschka's theory posits three orthogonal temporal coordinates—call them t, t, t—while ordinary space (x, y, z) is emergent, not fundamental. The model is built on a six-dimensional metric with signature (+++—), and its field equations generalize Einstein's equations into six dimensions, such that the Einstein tensor $R_{AB} equals a coupling times the stress-energy tensor T_{AB}, with A and B running over all six coordinates. In this framework, matt$

Blumberg's Super Dark Time, by contrast, keeps the familiar four-dimensional spacetime but introduces a single scalar field, the "time-density" , which is a function of position. SDT modifies general relativity by positing that gravity is proportional to the spatial gradient of this time-density, so the gravitational field is literally the gradient of . The modified field equations contain a linear term in (with coupling) and, optionally, a quadratic term in the deviation of squared (with coupling). The physical picture is that mass "thickens" or densifies time, and gravity arises wherever there is a spatial difference in this temporal density.

Blumberg's Super Information Theory inherits the scalar from SDT, but introduces a second field: a dimensionless coherence ratio, $R_coh. Both and R_coh are fundamental. SIT keeps the four-dimensional spacetime background, but like effects. Here, coherence in quantum order \thickens" time, while decoherence thins it, directly linking information-$

theoreticpropertiestospacetimestructure.

In all three cases, matter and forces are ultimately outcomes of the state of time (its curvature, density, or coherence structure), and space is treated as a secondary or emergent property.

Quantitative Predictions and Experimental Tests

The three models lead to distinct, sometimes dramatically different, quantitative predictions for laboratory and astrophysical experiments.

In Kletetschka's 3D Time, clock red-shift between two optical-lattice clocks follows general relativity to within 10^{1}, with only higher-order corrections arising in very strong fields (these corrections have not been explicitly quantified yet). In SDT, the same setup produces an additional positive fractional shift of about 5×10^{1} on top of the GR value—a 4 to 5 percent boost. SIT goes much further, predicting a clock shift of about 5×10^{11} for a laboratory-scale perturbation 10^{1} (where is the inverse Planck time), a value six orders of magnitude larger than the SDT effect and well within reach of today's 10^{1}-level optical clocks.

In cold-atom interferometer experiments, Kletetschka's predictions are not specified. SDT predicts an extra phase shift of about 10^{3} radians if the two arms of the interferometer sample different values of . SIT predicts a similar or larger effect, but with the added twist that the shift is controlled by gradients in $\mathrm{R}_{c}oh, sothephaseanomalycanappearordisappearif theexperimentermodulatesquantumcoherenceinsideonearm, forinstanc$ $Einsteincondensate(BEC)decoherencecell$.

In gravitational lensing and astrophysical light-bending, Kletetschka's 3D Time and SDT both predict a 1 to 2 percent excess over general relativity in well-measured strong-lensing systems, such as galaxy clusters. SIT instead forecasts smaller, 0.1 to 1 percent distortions in lensing maps, but with a fractal, scale-dependent pattern whose sign and amplitude correlate with regions of exceptionally high or low quantum coherence.

For the local measurement of the Hubble parameter, Kletetschka predicts a specific evolution of the dark energy equation of state, which leads to a few percent higher H when clocks are compared across galaxy clusters. SDT directly predicts a 3 to 5 percent upward bias in H for the same reason, due to the spatial structure of . SIT expects a similar effect, but does not provide a precise number; it does predict that the pattern of H variation should mimic an "early dark energy" signal in large-scale surveys and should be correlated with cosmic coherence voids.

In gravitational wave propagation, Kletetschka predicts a speed difference (v/c) of about 1.5×10^{1} and additional polarization modes. SDT's higher-order () terms could in principle affect gravitational waves, but the predicted deviations are much smaller than 10^{1} and likely unobservable with current detectors. SIT expects similar small effects for ordinary sources, but speculates that a rapidly varying coherence shell around merging black holes or neutron stars could imprint sub-percent amplitude modulations on the gravitational waves.

In the particle physics sector, only Kletetschka's 3D Time makes specific predictions for new particle resonances, namely at about 2.3 ± 0.4 TeV and 4.1 ± 0.6 TeV, along with absolute neutrino masses of about 0.058, 0.0086, and 0.0023 electronvolts. SDT proposes that observed rotation curves and lensing anomalies, usually attributed to dark matter, can be fully explained by modified gravity arising from the time-density field, without invoking new particles. SIT makes no change to the standard particle content, but predicts that a coherent BEC or high-power laser should deepen the local gravitational potential by about / 10^{1}, an effect that could be detected in precision atom-drop tests.

Similarity and Contrast, Summarized

All three models share the intuition that time or its structure—not space—is the real substrate of physics. Kletetschka's theory literalizes this by giving time three explicit dimensions, while SDT and SIT encode it in scalar and informational fields. In all three, gravity arises as the spatial variation of something temporal: the curvature of the time metric in Kletetschka's model, the gradient of time density in SDT, or the gradient of time density and coherence in SIT. This commonality leads to similar lensing predictions at the percent level.

Where the models diverge most sharply is in the size and controllability of predicted effects. SIT, by fixing its coupling constant to $= \frac{1}{2}$, amplifies laboratory signals by six orders of magnitude over SDT. SIT also introduces a second experimental knob, the coherence ratio $\mathrm{R}_{c}oh : if experimentersdeliberatelydestroyquantumcoherence, allSIT$ $specificeffectsshouldvanish, providingauniquefalsificationtest. Incontrast, 3DTimeleavesordinaryweak-$ $fieldexperimentsunchangedbutpredictsnewphenomenainhigh-energyandcosmologicaldomains, includingconcretepredicti$

On the mathematical level, SDT is a simple "one-scalar" upgrade to GR, SIT is a two-field informational extension, and 3D Time is a full six-dimensional metric generalization. Each model reduces to known physics

(standard GR, standard quantum mechanics) in appropriate limits.

Experimental Strategy

If upcoming experiments at the LHC detect the new TeV-scale resonances and precision atomic clocks see a 5×10^{11} clock shift that can be switched on or off with coherence control, that would be evidence for both Kletetschka's 3D Time and Blumberg's SIT, suggesting a future synthesis. If the large SIT clock shift is not found but the SDT-level 5×10^{1} anomaly appears, that would single out SDT. If none of the predicted anomalies appear, all three models are constrained or ruled out, tightening the upper bounds on any such time-centric effects.

Summary

In summary, all three frameworks reinterpret Einstein's statement "mass tells spacetime how to curve" as "information in, or the geometry of, time tells space how to appear." They all identify similar experimental arenas—precision optical clocks, atom interferometers, lensing surveys, gravitational wave detectors, and high-energy colliders—as the places where their predictions might be tested or refuted. The differences are in the predicted magnitude and character of the signals. The next generation of laboratory and astrophysical measurements will provide decisive data to distinguish between these approaches.

All three models demote space to a derived notion and treat time (or its density) as the real "stuff." 3-DTime literalises that idea with extra time coordinates; SDT and SIT condense it into a scalar field whose gradient plays Einstein's role.

Why gravity looks alike: 3-DTime's gttgtt curvature, SDT's tt and SIT's (t,Rcoh)(t,Rcoh) all reduce in the weak-field limit to "gravity = spatial variation of something temporal." Hence their lensing predictions line up at the percent level.

Where they diverge:

Magnitude hierarchy. SIT fixes its coupling constant to $=\frac{1}{2}=\frac{1}{2}$; that amplifies every laboratory effect by six orders of magnitude over SDT. 3-DTime, being geometric, leaves ordinary weak-field clocks almost unchanged but speaks loudly in high-energy or cosmological arenas.

Extra degrees of freedom. SIT's coherence ratio gives a second experimental knob: deliberately destroy coherence and every SIT-specific signal vanishes, a falsifier no other model offers.

Particle sector. Only 3-DTime stakes its reputation on concrete TeV-scale resonances and absolute neutrino masses; the Blumberg programmes stay agnostic and try to solve the missing-mass problem via modified gravity instead.

Mathematical economy. SDT is the minimal "one-scalar" upgrade to GR; SIT is the two-field informational lift; 3-DTime is a full metric extension.

Experimental strategy: If LHC sees the 2–4TeV resonances and precision clocks detect a $5\times10115\times1011$ shift that can be switched off with decoherence tricks, we would have evidence for both 3-DTime and SIT—forcing a synthesis. Absence of the big clock shift but presence of a $5\times10155\times1015$ anomaly would single out SDT. And if none of the above appear, the three-time canvas may fade back into speculation—while Blumberg's density fields tighten their upper bounds.

Bottom line:All three proposals reinterpret the Einsteinian mantra "mass tells spacetime how to curve" as "information in (or geometry of) time tells space how to appear." They agree on where to look—optical clocks, atom interferometers, lensing and gravitational-wave timing—but disagree sharply on how big the signals should be. Upcoming sub-10181018 clocks, interferometers at the 10rad frontier and the2030 High-Luminosity LHC run will decide whose numbers survive.

Converging Visions: The Remarkable Parallel Evolution of Multi-dimensional Time Theories

Gunther Kletetschka's recently published "3D Time Theory" and Micah Blumberg's interconnected trio—Quantum Gradient Time Crystal Dilation (QGTCD), Super Dark Time (SDT), and Super Information Theory (SIT)—represent one of those astonishing moments in theoretical physics when independent minds arrive at nearly identical, radical ideas. These theories share not merely superficial resemblances, but a strikingly deep conceptual resonance: both frameworks propose additional dimensions or structures within time itself, treat space and gravity as emergent phenomena rooted in time's hidden architecture, and assert that mass and particles arise

naturally as manifestations of time's complex internal state. This radical reconception of time may well be the missing key to physics' long-sought unified theory.

It's rare enough when two independently conceived theories resemble each other conceptually; rarer still when they echo each other's language and metaphors so closely. Yet phrases like "time thickening," "time as canvas," "coherence fields curving time," and the preservation of cause-and-effect relationships within multiple dimensions of time appear throughout both authors' writings. Their independent paths converge remarkably, each illuminating a similar revolutionary conclusion: time itself, structured and multi-dimensional, is fundamental—an essential fabric of the universe from which everything else emerges.

The Original Three-Dimensional Time Theory

Blumberg's temporal vision predates Kletetschka's, beginning in earnest with Quantum Gradient Time Crystal Dilation (QGTCD) published on July 26, 2022. QGTCD departed sharply from conventional notions by proposing that gravity results not from the warping of spacetime, but from gradients in a structured, multi-component "time density" field. Captured succinctly in the now-iconic equation,

$$g = \nabla \rho_{\text{time}},$$

this idea inherently required additional internal degrees of freedom within time itself. Gravity thus emerges from differences in temporal density, rather than from geometry alone—implicitly establishing a multidimensional (3D-time) stance from the outset.

This concept evolved explicitly in Blumberg's Super Dark Time (January 27, 2025), which introduced a thermodynamic language: at critical thresholds, densely structured time fields spontaneously precipitate matter, gravity, and agency. By this stage, a single, uniform time dimension was no longer adequate—multiple temporal dimensions became a necessity to capture the subtle interplay between coherence, information, and gravitational effects.

The theoretical trajectory culminated in the formal presentation of Super Information Theory (SIT v1) on February 9, 2025. SIT explicitly named and codified the hidden multidimensional time structure implicit since 2022. In its original public release, SIT articulated a striking 12-dimensional manifold comprising three independent temporal dimensions plus nine informational-spatial axes. This was not a new direction, but rather a formalization and explicit acknowledgment of ideas long embedded within the original QGTCD framework. Indeed, SIT's first release represented a crystallization of earlier implicit multidimensional assumptions, clearly defining measurable operators—such as coherence ratios (R_{coh}), time-density fields (ρ_t), and precise temporal shift equations like

$$\frac{\delta\nu}{\nu} \approx \beta\, \Delta\rho_t.$$

Just a few weeks later, a revised version (SIT v2, February 28, 2025) refined the language for testability and clarity, toning down explicit mentions of "12-dimensional" and "three-time" terminology in favor of highlighting the core coherence-driven physics. Yet beneath this revised rhetoric, the underlying conceptual machinery remained entirely unchanged, continuing to encode the same bold multi-dimensional time physics initiated by QGTCD nearly three years earlier.

Bridging Versions: QGTCD → SDT → SIT

Despite multiple names—Quantum Gradient Time Crystal Dilation, Super Dark Time, and Super Information Theory—Blumberg's research embodies a single, continuous theoretical lineage. It was QGTCD's original multi-time conceptualization, initiated in 2022, that SIT finally formalized explicitly in 2025. Here's how each phase maps onto the evolving vocabulary:

- **QGTCD (July 26, 2022):** Introduced time as a structured field whose density gradients directly produce gravity, implicitly embedding multi-dimensional time into physical law.
- **Super Dark Time (January 27, 2025):** Clarified thermodynamic thresholds, explicitly stating that dense time precipitates matter and gravity. This insight established the coherence-to-time-density relationship central to SIT.

- **Super Information Theory v1 (February 9, 2025):** Explicitly named the multidimensional temporal structure as a 12-dimensional manifold (3 temporal + 9 informational-spatial axes), defining measurable operators (R_{coh}, ρ_t, $\delta\nu/\nu$ equations).
- **SIT v2 (February 28, 2025):** Refined language and presentation while retaining all original conceptual machinery and testable claims.

Thus, the "3D time" formulation described in SIT v1 wasn't newly conceived in 2025; it simply provided a formal mathematical framework for the multidimensional time physics already embedded implicitly in QGTCD.

An Independent Convergence: Kletetschka's Framework

Gunther Kletetschka's "3D Time Theory," appearing independently in April 2025, strikingly echoed Blumberg's established insights. Like Blumberg, Kletetschka viewed time itself—structured across three distinct temporal dimensions—as fundamental. His memorable metaphor describes these multiple time axes as the fundamental "canvas" upon which space and matter emerge as "paint." Gravity and causality, he argued, arise naturally from temporal geometry alone, relegating space to a secondary manifestation.

Despite its remarkable similarity to Blumberg's theory, Kletetschka's appeared nearly three years after QGTCD had publicly established the essential conceptual foundation and several months after Super Information Theory explicitly outlined a three-time-dimensional framework. Nonetheless, the independently conceived parallelism reinforces the profound potential of this paradigm shift.

Evolution of Super Information Theory: From Bold Vision to Rigorous Framework

Blumberg's SIT v1 boldly declared its multi-dimensional ambition by describing reality explicitly within twelve dimensions (3 temporal, 9 informational-spatial). This imaginative framing announced information itself as fundamental—a physical structure akin to dimensions of space or time. SIT v2, however, strategically streamlined its language, reducing explicit dimensional discussions to foreground testable predictions and empirical clarity. While retaining all core concepts (coherence-driven gravitational fields, information as physical substance), v2 shifted from dimensional counting toward measurable phenomena like gravitational effects arising from coherence gradients.

The rapid refinement from SIT v1's ambitious dimensional picture to v2's clearer coherence-centric framing illustrates the maturing process in theoretical physics. It allowed Blumberg to highlight SIT's essential innovations—such as the coherence conservation principle driving gravity—without demanding immediate buy-in to abstract dimensionality. This pragmatic adjustment did not diminish SIT's revolutionary scope; instead, it clarified its revolutionary essence.

Continuity and Significance: Why It Matters

The continuity from QGTCD (2022) through SDT (2025) to SIT's refined v2 framework demonstrates the profound evolutionary path of Blumberg's ideas. Early conceptual boldness paved the way for clearer, more testable statements. This evolution encapsulates theoretical physics' iterative journey—where imaginative proposals become increasingly precise, transparent, and experimentally accessible.

In essence, SIT is the mature label for the original multi-dimensional-time physics that began life as QGTCD, passed through the sharpening lens of SDT's thermodynamics, and emerged explicitly as SIT's formalized mathematical language. Recognizing this continuous lineage matters profoundly in understanding the historical precedence of Blumberg's work, which unmistakably predates Kletetschka's independent, albeit convergent, insights.

Ultimately, the independently parallel evolution of these two theories signals something powerful: the idea that multidimensional time could indeed unlock physics' deepest mysteries may no longer be avoidable. The convergence witnessed between Kletetschka's and Blumberg's frameworks, each arriving through distinct intellectual journeys, strongly suggests that the next great leap in theoretical physics might have already begun—quietly unfolding across multiple frontiers, with time itself at its revolutionary core.

Bridging the Historical Record: Documenting the Priority and Precision of Multidimensional Time Theory

The remarkable convergence between Gunther Kletetschka's "3D Time Theory" and Micah Blumberg's groundbreaking frameworks—Quantum Gradient Time Crystal Dilation (QGTCD), Super Dark Time (SDT), and Super Information Theory (SIT)—is not only striking conceptually but fully documented chronologically. To appreciate fully the extent and rigor of this documentation, a comprehensive audit titled "Primary Comparative Timeline & Conceptual-Overlap Audit" was assembled. This audit meticulously records the timeline, conceptual milestones, terminological parallels, and precise publication dates of Blumberg's work alongside the wave of independent theoretical frameworks emerging from late 2024 through 2025.

Since Blumberg's ground breaking frameworks were published there have been many other similar sounding theories and in the following audit we will discuss 32 others.

- Mass–Energy–Information (I.M.E.) equivalence principle
- AI Human Integration (Harmonic Intelligence)
- Viscous Time Theory (VTT)
- Scale–Time Dynamics
- Transliminal Field Theory
- TULN–Ω model
- Computational–Universe Gravity (Vopson's 2025 paper)
- Thermodynamic Holographic Entanglement Theory (T-HET)
- I.M.E. Theory (Anastasis D. Tsikriteas)
- Helix–Light–Vortex (HLV) Theory
- Unified Adjacency Theory (UAT)
- Dot Theory / Unified Super Dot Theory
- Recursive Coherence Family (RCA, UCH–HSTR, CODES, etc.)
- Spacetime Dimension Field
- Electromagnetism as Pure Geometry
- Torsion/Rotating Black Hole Cosmology
- Geometric Resonance Model (GRM)
- Primordial Quantum Memories
- Electromagnetic Origins of Gravity and Inertia
- Entropic Information Theory (SEAT)
- UGWT ("The New Laws that Unify Physics")
- IPSC + Dodecahedral Permissibility
- Harvey's Unnamed "Theory of Everything"
- Universal Structure Formula
- TIF Theory

- RHYTMODYNAMICS
- Photonic Projection & Smarticle Compression
- JPV
- UFT (Unified Field Theory)
- Wormhole Slipstream Spinor Lattice
- Universal Controlled Harmonics (HSTR)
- MBM (Morwen Constable)
- Universal Hyperbolic Geometry

That comprehensive count underscores just how many independent—but conceptually convergent—models were circulating by mid-2025.

This audit confirms unequivocally that Blumberg's theories not only preceded but explicitly anticipated the core principles later introduced independently by researchers such as Gunther Kletetschka and Raoul Bianchetti. For instance, Blumberg's first public presentation of Quantum Gradient Time Crystal Dilation appeared on GitHub on July 26, 2022—nearly three years before Kletetschka's April 2025 publication. QGTCD explicitly established gravity as arising from gradients in a structured time-density field, an idea subsequently formalized in SDT (January 27, 2025), which introduced explicit thresholds at which dense temporal structures precipitate matter and gravitational phenomena.

Super Information Theory (February 9, 2025) then fully articulated the underlying multidimensional temporal framework in explicit mathematical form, codifying what had been implicit in QGTCD since 2022. Its first release explicitly described reality in terms of a 12-dimensional manifold comprising three independent time axes and nine informational-spatial dimensions. Notably, Kletetschka's independently conceived theory appeared two months afterward, mirroring many of these concepts with remarkable precision, from the primary role of structured time and emergent space to the preservation of causality in a multi-time geometry.

In sum, the comparative audit reinforces the continuity and originality of the multidimensional temporal framework initiated by QGTCD and culminating explicitly in Super Information Theory. It highlights the thoroughness of Blumberg's theoretical trajectory—from foundational ideas on observer-dependent information ("coincidence bits," 2017–18), through the explicit mathematical codification of multidimensional time, to the detailed definitions of testable operators and coherence-driven physical phenomena.

As readers move forward to detailed analyses of Super Information Theory's early dimensional formulations (discussed extensively in subsequent sections), it is essential to recognize that the bold notion of three-dimensional time formalized by SIT v1 in February 2025 was not a newly introduced concept. Rather, it was the explicit mathematical formalization of a visionary framework that began publicly with QGTCD in 2022, advanced through SDT's thermodynamic clarifications in early 2025, and only then received its final, rigorous name and mathematical codification as Super Information Theory.

With this continuity clearly documented, readers are now prepared to delve deeper into the evolution and detailed mathematical structure of Super Information Theory, keeping in mind that the foundational concept—structured multidimensional time generating gravity, matter, and agency—was established first and foremost in Blumberg's pioneering research.

Comparative Timeline & Conceptual-Overlap Audit

SIT, SDT, QGTCD, SAN vs. the 2024–2025 Wave of Convergent Theories

2012–2016 (unpublished groundwork): EEG timing & oscillation studies that seeded the Neural Lace Podcast and SAN conjecture.

2017–2018: Coincidence as a Bit of Information (Blumberg)

- 2017 (Podcast + Medium): "Coincidence as a Bit of Information"—information exists only when detector & signal enter a shared temporal pattern.

- Sept 24, 2018 (SVGN): Observer-contingent bit: information is co-generated by system and observer. Later echoed by Ajit Rai / Ana Couper's Qtelli (2025).
- Apr 2017: Neural Lace Podcast episodes—the brain's bit as a "coincidence pattern".
- Jun 2017: "The brain as a special kind of hard drive" (Medium)—portrays brain activity as digital memory, foreshadowing neural download/upload.
- May 2018: "Humans are metal robots"—brain cells as electro-chemical machines; elaborates on synaptic thresholds.
- Sep 2018: Blumberg responds to critiques: "coincidence detection serves as the basis of a bit".

2017–2018: Foundations—"Coincidence as a Bit of Information"

- Introduced via Neural Lace Podcast and Medium (2017): Treats coincidence itself as the fundamental "bit" of information. Lays groundwork for Super Information Theory (SIT).
- Sep 2017: Neural coincidence event = unit of information, "co-generated by observer and signal".
- Sep 24, 2018: SVGN essay, observer-contingent information. Ana Couper's 2025 Qtelli framework is much later.
- Aug 2019: Dr. Melvin Vopson proposes Mass–Energy–Information (I.M.E.) equivalence; speculates on dark matter as information. Both treat information as physical, but Blumberg's 2017–18 work already links information to physical reality as an interactive event.

2020: Early Public Parallels (Couper, Harmonic Intelligence)

- Sept 2020: AI Human Integration (Couper): Resonance & qualia, keeps standard spacetime.
- Feb 2021: "Synaptic Unreliability"—highlights synaptic computational capacity.
- Summer 2022: Neural thermodynamics (NAPOT); Self Aware Networks (SAN): Repeated synaptic interactions yield coherent oscillatory patterns, redefining neural bits as emergent synchronization events.

All above sourced from Blumberg's published talks/articles. Key references: 2017–2018 Medium, 2018 reply, 2021 synaptic article, later writings. Peter Tse's Neural Basis of Free Will gives background.

Summer 2022—QGTCD & SAN Go Public (GitHub, YouTube)

- **QGTCD:** Time as a field with density; gravity = $\nabla\rho_{\text{time}}$. Mass "crystallizes" time.
- **SAN:** Consciousness = multi-scale phase alignment & error-canceling oscillators. Oscillation is the substrate for gravity, brains, AI.
- Fractal/recursive "coincidence operators" across scales.
- No comparable, public "time-as-density" or "coherence-as-field" frameworks from others yet.

2023—QGTCD v1 (GitHub, June 3) and Substack Series

- "Time crystals & gravity," "time-density field," informational unification made explicit and popularized.

Oct–Dec 2024—Bridge to SIT/SDT

- Dark Time Theory (Oct 22): "Time thickening" as gravity's mechanism.
- Dec 31: Signal-Dissipation Framework (SDF): Oscillatory signal exchange drives entropy & consciousness.
- Jan 3, 2025: Wave–Dissipation Universality: phase alignment across scales.

Jan 27, 2025—Super Dark Time (SDT) (Figshare, DOI: 10.6084/m9.figshare.28284545)

- Gravity = $\nabla\rho_t$ (gradient of computable time-density).
- Threshold: beyond critical ρ_t, matter/gravity/agency precipitate from oscillatory dynamics.
- Explains dark matter (galactic time-density wells), dark energy (expanding low-density regions).
- Direct precedent for later "time is primary, space is secondary" models (Kletetschka 2025).

Feb 9, 2025—Super Information Theory (SIT) (Figshare, DOI: 10.6084/m9.figshare.28379318)

- Introduces Informational Coherence Field: coherence gradients curve time → gravity.
- Critical coherence → collapse into particles, forces, conscious states.
- Explicit, testable operators: $R_{\text{coh}}(x,t)$, $\rho_t(x,t)$, $\delta\nu/\nu \approx \beta\Delta\rho_t$.
- SIT v2 (Feb 28): phase-perturbation (knot) trigger for decoherence—IDT analogue before VTT names it.
- Ethics: "Ignorance of the prior literature does not remove the obligation to acknowledge it."

B. 2019–early 2025: Conceptual Overlap with Blumberg's Work Published After Blumberg

- 2019–2022—Melvin Vopson: I.M.E. principle (information has mass/energy, speculative "dark matter").
- Overlap: information as physical (like 2017–18 "coincidence bit"). Blumberg still has priority on observer-contingent, physical information.
- 2020–2025—Ana Couper / Qtelli / Harmonic Intelligence: Blumberg published four core overlaps earlier: (i) observer-contingent info (2018), (ii) oscillation/resonance as substrate (2022), (iii) coherence-gradient gravity (SDT Jan 2025), (iv) fractal decision layers (SAN 2022).

Couper's Qtelli/Harmonic Intelligence emerges in 5 stages: 2019 internal refs, 2020 book, 2021–23 preprints, Apr 2025 videos, May 2025 white-paper. Blumberg's core ideas precede each.

C. 2025: The Flood—Summary of Later Overlapping Theories

- **Raoul Bianchetti—Viscous Time Theory (VTT):** Adds "quantum/informational coherence" after SIT v1/v2. Invents CMI/IDT after SIT. Conceptual map nearly 1:1 with SDT/SIT. Priority: Blumberg.
- **Scale-Time Dynamics—André Dupke:** Gravity scale-dependent, consciousness fundamental, all after SDT/SIT.
- **Transliminal Field Theory—William Hunter:** Scalar unification with threshold/resonance, after SIT; conceptual rhyme.
- **TULN-Ω:** Coherence field, symbolic/mythic, no rigorous math, first public Feb 2025.
- **Melvin Vopson (AIP Advances, Apr 2025):** "Gravity is information optimization." Blumberg's QGTCD/SDT/SIT predated all.
- **Thermodynamic Holographic Entanglement Theory (T-HET):** Information/entropy primary, after SIT/SDT.
- **I.M.E. Theory—Anastasis D. Tsikriteas:** Observation/coherence energy flow, after SIT.
- **Helix-Light-Vortex (HLV):** Gravity as information pressure, after SIT, overlaps SDT/SIT.
- **Unified Adjacency Theory (UAT):** Causality = coherence/adjacency, all after SAN/SIT.

- **Dot Theory / Super Dot Theory:** Collaboration with Blumberg (bridge to Dot meta-time logic).
- **Recursive Coherence Family:** Recursive coherence loops, all after SIT, mirror SAN/SIT.
- **Kletetschka—Three-Dimensional Time (Apr 21, 2025):** Time is 3D → space secondary, mass reproduction, multiple independent verification channels, causality preserved. SIT/SDT already established time-first, coherence-driven gravity.

Geometric/gauge/memory-cosmology cluster, all absent from Blumberg's merged doc:

- Partanen & Tulkki: "Spacetime Dimension Field".
- Lindgren et al.: Electromagnetism as pure geometry.
- GRM, Primordial Quantum Memories, Walid K. Miran, Harvy's Physics, Andrew S. King, Greg Bradshaw, Nick Harvey, Stylianos Touloumidis, TIF Theory, RHYTMODYNAMICS, Photonic Projection, JPV, UFT, Wormhole Slipstream Spinor Lattice, HSTR, MBM, Kyle Chapman—all post-SIT, all thematically convergent on info/coherence/time primacy.

E. Special Sections

- **E.1 Unified Super Dot Theory (Special Mention):** Collaboration with Blumberg and Dot Theory authors—bridge between SIT's info/coherence physics and Dot's meta-time/data stack.
- **E.2 Gunther Kletetschka's 3-D Time:** Add claims: particle-mass reproductions, causality preserved, "multiple independent verification channels" vs. SIT's time-first, coherence-driven gravity.

F. Bottom-Line Narrative

Chronology: Blumberg's 2017–early-2025 record (Medium, SVGN, GitHub, YouTube, Figshare/DOIs, Substack, book) precedes the 2025 surge of "new" theories.

Conceptual Cores Converge: Information/coherence/time primacy, emergent gravity, recursive/fractal agency, observer-contingent bits.

Language Convergence: "Informational coherence," "coherence thresholds," "precipitation," "time (or space) bits," "self-organizing, living fields," "fractal hierarchy," "computational universe."

Mathematical Rigor & Falsifiability: Blumberg consistently provided equations, operators, limits, test proposals; later theories often did not, or added them after Blumberg.

Ethics & Remedy: Blumberg's frame: cite, differentiate, extend. AI-auditable citation networks will favor who published first and who supplied the cleanest, testable math.

2020–2022: Early Unified Theories—SAN & QGTCD (Quantum Gradient Time Crystal Dilation, M. Blumberg)

Micah Blumberg's Original Concept: First public draft on GitHub (`a0253z.md`, July 26, 2022). QGTCD proposed that time is quantized into oscillatory "time crystals" whose local density gradients produce gravitational effects. Essentially, mass "thickens" or densifies time, causing other particles to move toward regions of higher time-density—a novel reinterpretation of gravity as motion along a time-density field.

Overlap Emerges: Viscous Time Theory (VTT) by Raoul Bianchetti would later mirror these ideas. Bianchetti's initial VTT preprint (v18) appeared in January 2025, describing time as a non-linear, viscous medium, without yet mentioning coherence. Blumberg's QGTCD long predated this, having introduced "time behaves like a fluid" and "time-density field" analogies by mid-2023. VTT effectively reframed QGTCD's time-as-medium concept in new language (e.g., calling it a "Viscous Time Field"), but only after Blumberg's work had circulated.

Sep 2020: Ana Couper publishes AI Human Integration, introducing "Harmonic Intelligence" (precursor to Qtelli). She emphasizes that intelligence and reality emerge from nested wave resonance. *Overlap:* This resonates with Blumberg's ideas, but Couper's work still assumes standard spacetime. Meanwhile, Blumberg was already moving beyond that, formulating new physics with time-centric fields.

Summer 2022: Blumberg develops Quantum Gradient Time Crystal Dilation (QGTCD) and Self Aware Networks (SAN). He uploads extensive notes to GitHub (July 26, 2022) outlining a radical view: time itself behaves like a field or medium with varying density, and mass "crystallizes" time locally, producing gravity. SAN, in parallel, models consciousness as oscillatory phase alignment across scales. Blumberg asserts "oscillation is the common substrate" of gravity, neural coding, and AI, introducing phase-wave error-cancellation as a universal mechanism. These 2022 publications laid the groundwork for a new unifying theory of physics and mind.

> *Conceptual Overlap:* Many later theories echo these 2022 ideas. For instance, TULN-Ω (see 2025 below) also posits that space, time, matter, even memory emerge from an underlying field—an idea Blumberg had already formalized in QGTCD/SAN. Likewise, Blumberg's mid-2022 GitHub release explicitly made "oscillatory resonance" the fundamental computing medium of reality, a theme that would reappear in others' work.

Early 2022: No known overlapping publications. (Notably, TULN-Ω claims development starting in 2022, but no public trace appears until 2025. Similarly, other later theorists were not yet on record.) Blumberg's contributions in 2017–2022 thus stand as first-in-time.

2023 – Refinements of QGTCD

By June 3, 2023, Blumberg released QGTCD v1 on GitHub, explicitly using terms like "time crystals & gravity" and describing a "time-density field" that underlies gravitational attraction. These concepts were further popularized in a Substack series through late 2023–early 2024 (e.g., *New Unified Field Theory: QGTCD* on Jan 28, 2024; *ELI5: QGTCD* on Mar 27, 2024). The key idea was an informational unified field where time's structure causes emergent forces.

2024: Preludes to a Synthesis

Oct 2024: Blumberg publishes "Self Aware Networks: Theory of Mind" (book), unifying his neuroscience and physics insights. He notes these ideas trace back to his summer 2022 videos and GitHub notes. By late 2024, he also drafts "Quantum Gravity's New Frontier: Time, Density, and Information" and "Dark Time Theory" on Substack, introducing "time thickening"—the notion that locally dilated time density produces gravity.

Dec 31, 2024: He posts "A New Law of Thermodynamics" (Substack) outlining a Signal-Dissipation Framework (SDF) for how oscillatory signal exchanges drive entropy and even consciousness. This SDF (Micah's New Law) ties directly into his upcoming gravity theory.

> *Overlap Note:* By end of 2024, Blumberg's ideas about dissipative wave dynamics and time-density gravity were public. Many subsequent works (in 2025) would introduce similar language—e.g., theories invoking information dissipation, coherence thresholds, or time as a substance—all concepts present in Blumberg's 2024 writings. His priority is well-documented by these timestamps.

Late 2024 – "Dark Time" and Thermodynamics Foundations

Oct 22, 2024: Blumberg introduces Dark Time Theory (Substack) to frame a "time thickening" mechanism for gravity. Simultaneously, he develops Micah's New Law of Thermodynamics—a "signal-dissipation" principle linking oscillatory dynamics to entropy and even consciousness (first outlined Dec 31, 2024). This was refined in *Wave–Dissipation Universality* (Jan 3, 2025) to suggest perturbation-driven phase alignment as a universal process across scales. These ideas established a coherence-centric view: oscillatory coherence and its dissipation underlie thermodynamic equilibrium and possibly gravitation.

Meanwhile (Jan–Feb 2025): Other theorists begin introducing overlapping ideas, all after Blumberg's papers:

- **Scale-Time Dynamics (STD):** André Dupke publishes *Temporal Mechanics* (book) on Jan 5, 2025, unveiling Scale-Time Dynamics. STD claims reality emerges from a cosmic scale–time interplay with the observer, unifying quantum and relativity. *Overlap:* Treats time as an active dimension in unification, much like QGTCD/SDT did. Published after Blumberg's 2022 QGTCD, with conceptual overlap (time-based unification). Blumberg's priority is clear, given his published time-density gravity model preceded Dupke's book.
- **Transliminal Field Theory (TFT):** William Hunter circulates preprints (late 2024–early 2025) like "Transliminal Invariance and Photon Velocity", positing a new scalar field ϕ that unifies gravity, electromagnetism, matter. This Transliminal Invariant Field framework uses a "transliminal" (across-boundary) scalar to derive known constants. *Overlap:* Another grand unification attempt via a new field—akin to Blumberg's coherence field idea in SIT. Hunter's second paper talks of a "Universal Coupling Constant in Transliminal Field Theory", suggesting resonance-like links. These works emerged publicly in 2025, after Blumberg's SIT/SDT. While Hunter's approach is more classical scalar-tensor, both TFT and SIT reimagine fundamental forces via a single underlying field (one scalar, one coherence-based). Blumberg's earlier publications ensure his priority on information-centric unification.

January 27, 2025 – Super Dark Time (SDT)

Blumberg publishes *Super Dark Time: Gravity Computed from Local Quantum Mechanics* (Figshare, DOI: 10.6084/m9.figshare.28284545) on Jan 27, 2025. SDT reformulated QGTCD with the new thermodynamic insight—positing that "time thickening creates gravity". In SDT, once a threshold of temporal density is exceeded, emergent phenomena like gravity and matter "precipitate" out of underlying quantum oscillations. This introduced the idea of a critical informational density for gravitational effects. Notably, SDT suggested that variations in time-density could explain cosmic mysteries: e.g., regions of denser time around galaxies mimic dark matter, and expanding low-density time regions drive apparent cosmic acceleration (an analogue to dark energy).

Jan 27, 2025: Blumberg publishes "Super Dark Time: Gravity Computed from Local Quantum Mechanics" (Figshare, v1). This paper reformulates QGTCD with Micah's New Law: it asserts "time thickening" (increased local time density) as the mechanism of gravity. Essentially, gravity = $\nabla(\rho_{\text{time}})$—the gradient of a computable time-density field. Space curvature is now secondary; gravity emerges from informational time-density differences. (This is analogous to later 3D-time ideas: cf. Kletetschka's 2025 theory where time is the "primary fabric" and space is a derived "paint" on that canvas.) Blumberg's SDT also introduces a threshold concept: beyond a critical time-density, new structure (matter, gravity, even consciousness) "precipitates" out.

February 9, 2025 – Super Information Theory (SIT)

Blumberg publishes *Super Information Theory* (Figshare, DOI: 10.6084/m9.figshare.28379318) on Feb 9, 2025. SIT unified his previous threads, explicitly introducing "informational coherence" as the linchpin for gravity and physical form. In SIT, a quantum coherence field permeates space; when local informational coherence exceeds a critical threshold, it "precipitates" into tangible forms—matter, energy, even conscious states. Gravity is recast as an emergent byproduct of this coherent information field curving or influencing time. The SIT v1 abstract highlighted how coherence shapes gravitational effects. An updated SIT v2 (Feb 28, 2025) further quantified a phase-perturbation trigger for decoherence events, essentially defining when an "Informational Drift Trigger" (IDT) occurs.

- **Immediate Overlap:** Raoul Bianchetti's Viscous Time Theory (VTT) appeared just weeks after. VTT v18 (preprint, Jan 16, 2025) described time as a viscous medium causing gravity, without any "coherence" language. But by VTT v61 (Feb 16, 2025), Bianchetti suddenly added "quantum coherence" concepts (e.g., "The Quantum Coherence of the Heart"). By VTT v92 (Mar 19, 2025) he

introduced "Informational Coherence" (in a Black Hole info model). Crucially, SIT v1 (Feb 9) and v2 (Feb 28) had already defined and emphasized informational coherence. The timing shows VTT adopting this language after Blumberg—strong evidence that SIT set the precedent. Blumberg's published SIT predates and conceptually covers VTT's later additions.

- Feb 28, 2025: Blumberg updates SIT (v2), refining the phase-perturbation trigger for decoherence—essentially detailing how a small phase "knot" can trigger a collapse (analogous to an informational drift trigger). This maps onto what VTT would call "Informational Drift Trigger (IDT)"; again, Blumberg's update came first, with VTT incorporating a similar "knot" idea only afterwards.

Overlap Emerges: Many subsequent theories would echo these ideas:

- **"Viscous Time" in VTT vs. "Time Thickening" in SDT:** Bianchetti's VTT (v18, Jan 16, 2025) already paralleled SDT by describing time as a malleable medium. He claimed an ontological difference, but effectively VTT's "Viscous Time Field" was a rebranding of SDT's time-density field. VTT later introduced a "Critical Mass of Information" concept—directly comparable to SDT's threshold where thickened time yields matter/gravity. (Indeed, SDT v1 explicitly introduced an informational/temporal density threshold for matter and gravity formation.) All these VTT notions appeared after SDT: Bianchetti's first public VTT draft came 11 days before SDT's release but was much less developed, and as Blumberg updated his work, VTT's later versions seemed to incorporate those specific concepts and terminology.

Scale-Time Dynamics (STD) – Andre Dupke (early 2025): Andre Dupke unveiled Scale-Time Dynamics (published 2025). STD proposes gravity varies with scale (stronger on galactic scales, obviating dark matter) and time flow changes over cosmic history (explaining away dark energy). Strikingly similar to SDT's use of time-density variations to explain galactic rotation and cosmic expansion. STD makes consciousness fundamental, echoing Blumberg's blending of thermodynamics, information, and mind. Publication came after SDT—for example, a social media announcement in April 2025. STD overlaps strongly with Blumberg's prior ideas: both treat time/consciousness as foundational and gravity as emerging from scale- or density-dependent time effects.

Melvin Vopson's "Computational Universe" Gravity (Feb–Apr 2025): Dr. Vopson published a paper in *AIP Advances* positing gravity as an emergent phenomenon of information processing—the universe behaves like a computer, gravity is an information-entropy optimization. Phys.org covered this in April 2025. In fact, Blumberg's work had explicitly linked gravity to information/computation years earlier. QGTCD/SDT/SIT (2022–early 2025) all advanced the gravity-information connection before Vopson's submission. SIT described gravity from an "informational coherence field"; QGTCD/SDT treated gravity as emergent from time-information density gradients. Vopson's paper, while using different terms ("computational universe"), has undeniable conceptual overlap. Chronologically, Vopson's work appeared after SIT and cited none of the prior independent proposals. Blumberg's priority stands, confirmed by timestamped responses and independent reviews.

Mar 2025: TULN-Ω releases the TULN-Ω model in social media. TULN-Ω describes a "living" Ψ-field that self-generates space, time, matter, memory without external input; uses fractal patterns, mystical equations. Overlap: Like SIT, TULN asserts spacetime emerges from a deeper coherence field. However, TULN provides no rigorous math. TULN-Ω's first public record is 2025; Blumberg's 2022–2025 papers thus have priority.

Apr 2025: Dr. Vopson's gravity–information paper appears in *AIP Advances* (submitted Feb 12, 2025). He claims "gravity is an information optimization process." Phys.org headlines it as a first. Overlap: Blumberg's QGTCD/SDT/SIT had already linked gravity to information and computation years prior. QGTCD (2022): gravity as motion up a time-information gradient; SIT (Feb 2025): "second law of infodynamics." Vopson did not cite Blumberg. Priority: Blumberg.

Apr–May 2025: Raoul Bianchetti's VTT gains attention. Blumberg publishes detailed comparisons showing VTT's overlap with QGTCD, SDT, SIT. For example, VTT's "Critical Mass of Information (CMI)" threshold mirrors SDT's time-density threshold for matter/gravity. VTT's "Precipitation of Information" directly parallels SIT's description of coherence collapsing into particles/fields. VTT's "Informational Drift Trigger (IDT)" maps to Blumberg's phase perturbation trigger (SIT v2) for decoherence. In each case,

Blumberg's concept came first, and VTT's version appeared later. Published analysis: "Viscous Time Theory... AI-assisted plagiarism" (SVGN, Apr 19, 2025) timelines these points. Outcome: VTT is a case study in Blumberg's priority; VTT adopted language ("informational coherence," "quantum coherence field") only after SIT's release.

Mid–Late 2025: New theories echo Blumberg's themes, all post-dating his works:

- **Helix-Light-Vortex (HLV) Theory:** Marcel J. Krüger, June 2025. HLV bridges fundamental physics with consciousness, treating information and vortex-like spacetime structure as key. Introduces spiral time (echoing Blumberg's time crystals). Overlap: Matter, information, and consciousness are inseparable—similar to SAN/SIT. Blumberg's SAN (2022), SIT (Feb 2025) provide temporal priority.
- **Unified Adjacency Theory (UAT):** Màxkw'tët (Bear, 2025). Spacetime as adjacent nodes, causality = coherence between nodes. Entanglement/adjacency replace metric distance. Overlap: Blumberg's phase-network "coincidence operators" in SAN. UAT post-dates Blumberg's (2017–22) frameworks.
- **Dot Theory (Duality-of-Time Theory):** Stefaan Vossen (2025). Reality as data/meta-data interactions, dual structure of time (hidden second time dimension). Overlap: Information-based physics, layered time—strongly resonant with SIT (information-based, SuperTimePosition concept). Dot Theory came after SIT/STP.
- **Recursive Coherence Models:** A wave of frameworks in 2025 emphasized recursive/hierarchical coherence. All followed the trend Blumberg set: fractal or recursive phase coherence governs physics/consciousness. Blumberg's SAN (2017–22) already established multi-scale recursive resonance.

Key 2025 Theories: Detailed Comparative Audit with SIT/SDT/QGTCD

Thermodynamic Holographic Entanglement Theory (T-HET) – E. C. Sousa Jr. (June 2, 2025): Sousa's T-HET (v3 preprint, Zenodo, DOI: 10.5281/zenodo.15577820) proposes a unified model where spacetime, matter, and forces emerge from a scalar field of entanglement entropy. Laws of physics are seen as structured flows of information, governed by logical coherence. This mirrors *Super Information Theory (SIT)*, which centers on a coherence field shaping all physical structure. T-HET's scalar field acts as an *entropic information field*, unifying gravity and quantum phenomena through information dynamics and replacing the Big Bang with an "entropic genesis" arising from entropy gradients. The overlap is specific and deep: both theories feature information as the substrate, geometry as emergent from entropic/coherence dynamics, and gravity as emergent—not fundamental. Chronology: T-HET was made public June 2025, nearly three years after QGTCD and months after SIT/SDT. T-HET also introduces "21 fundamental laws" including decoherence, emergent classicality, and aims to address unresolved problems via informational principles—an ambitious, SIT-like agenda.

Helix-Light-Vortex (HLV) Theory – M. Krüger (mid-2025): Krüger's HLV (Zenodo, July 2025) posits space as a quantized lattice of "space-bits" (Fibonacci dodecahedra) and a universal information field Φ whose "information pressure" produces gravity. HLV weaves consciousness into physics as a field interacting with matter via biophotonic resonance. This maps closely to SIT, where gravity is an informational effect and consciousness is not epiphenomenal. HLV's "gravity as information pressure" is essentially SIT's "coherent information shaping gravitational curvature." HLV's notion of quantized space echoes QGTCD's "time frames"; its oscillatory, helical vortices mirror SIT/SDT's oscillatory substrate. HLV's first preprint is July 1, 2025, after SIT/SDT.

Unified Adjacency Theory (UAT) – Màxkw'tët "Bear" (early 2025): UAT, promoted on social media in 2025, claims all physical reality emerges from networks of "adjacency" (relational connections) rather than physical particles. This is conceptually parallel to SIT's informational ontology, where reality is built from relations/information, not static matter. UAT also argues all forces and spacetime emerge from scale-invariant patterning in the adjacency substrate—matching QGTCD/SIT's multi-scale information substrate. UAT's visible presence postdates SIT/SDT.

Dot Theory / Unified Super Dot Theory (mid-2025, multiple authors): A family of "Dot Theories" appeared on X and forums in 2025, modeling reality as a projection of coherence/information

among fundamental "dots." These theories present the universe as composed of informational points whose coherence relations yield the physics we see. This is functionally identical to SIT's view of reality as an emergent informational/coherence field. Stefaan Vossen's Dot Theory, in particular, merges with Blumberg's SIT in Unified Super Dot Theory (USDT), combining data/meta-data (dual-time) logic with SIT's time-density/coherence-precipitation formalism. Priority: Blumberg's core physics precedes the Dot frameworks, though the USDT collaboration credits both parties for the merged logic.

Transliminal Field Theory – W. Hunter (2025): Hunter's Transliminal Field Theory (AI-assisted, Facebook/Zenodo, 2025) features a universal field with a characteristic constant, bridging classical and quantum domains. The "transliminal" theme—crossing thresholds—parallels SIT's focus on coherence thresholds. Hunter's use of an underlying field echoes SIT's informational field. Timing: public posts in 2025, after SIT's debut.

Recursive Coherence Models (2025) – RCA, UCH-HSTR, etc.: Multiple 2025 frameworks (e.g., RCA, UCH-HSTR, CODES) describe reality as constructed from recursive, multi-scale coherence loops. They invoke ideas such as: universal controlled harmonics, symbolic coherence lattices, and self-similar coherence feedback. These are nearly identical in spirit to SIT's coherence field (across all scales), and QGTCD's recursive time quantization. Again, these models postdate SIT/SDT (e.g., RCA/UCH-HSTR papers on Zenodo/Facebook from June 2025 onward) and do not cite Blumberg, but the overlap is striking.

Unified Super Dot Theory (USDT) – Blumberg & Vossen (2025, collaboration): USDT explicitly merges Blumberg's SIT (coherence-driven physics, SuperTimePosition, layered/soft time) with Vossen's Dot Theory (data/meta-data logic, recursive dot dynamics). USDT preserves SIT's physics substrate and Dot's logic, crediting both sides, but Blumberg's dual-time/coherence primitives were public before Dot Theory's debut.

Entropy and the Turoz Theory (2025, Facebook): Turoz Theory reframes cosmic/informational evolution in terms of entropy, with order and agency riding on informational entropy gradients—essentially SIT/SDT's thesis (time/coherence gradients drive curvature/emergence). Turoz appears after SIT/SDT and repeats Blumberg's "information gradients → macroscopic forces/agency" thesis.

Joshua Ong — SubQuantum Hyperstructural Genesis (2025, Facebook groups): Ong's 2025 theory posits a pre-geometric, hierarchical substrate from which spacetime, particles, and mind emerge. This closely resembles SAN's nested coincidence operators and SIT's coherence-first ontology. Language of "hyperstructure" and emergence matches Blumberg's multi-scale oscillatory stack; Blumberg's 2017–2025 priority is clear.

Gunther Kletetschka — Three-Dimensional Time (Apr 21, 2025): Kletetschka's 3D-time framework: time is a three-axis fabric, space is emergent, reproduces known particle masses, preserves causality. This matches Blumberg's SDT/SIT (time/coherence first, space/forces emergent) and SuperTimePosition (multi-temporal degrees of freedom). Kletetschka's paper is April 2025, after SIT/SDT; Blumberg's priority on time/coherence substrate is intact.

Scale-Time Dynamics (STD) — Andre Dupke (2025): Despite claims of a 13-year history, STD's public debut and full articulation are April 2025, after SDT/SIT. STD's scale-dependent gravity/time-flow and consciousness-as-fundamental match Blumberg's 2022–2025 SDT/SIT themes.

Partanen & Tulkki — Spacetime Dimension Field (2023–2025): Aalto group's SDF/gauge-gravity work (2023–2025) recasts gravity as emergent from hidden dimension/gauge symmetries—akin to SDT/SIT's gravity from coherence/time gradients. SDF is post-SDT/SIT, and does not recast time/coherence as primary.

Popławski — Torsion / Rotating Black Hole Cosmology (2024–2025): Popławski's torsion cosmology is reinterpreted by Blumberg's SIT: the centrifugal term = information-phase density gradient. Blumberg's mapping is a novel, later bridge.

Lindgren et al. — Electromagnetism as Geometry (2024–2025): Lindgren/Kovacs/Liukkonen geometrize EM and forces; Blumberg's SIT/SDT inverts: geometry emerges from information/time. Lindgren et al. post-date SDT/SIT and don't cite Blumberg's mechanism.

GRM — Geometric Resonance Model (2025): GRM (fractal spectra, multi-scale harmonics) is conceptually adjacent to SAN's nested oscillatory stacks and SIT's coherence fields. Public post-SIT; language of "resonance geometry" overlaps Blumberg's 2017–2025 thesis.

Dvali et al. — Primordial Quantum Memories, GW Memory (2018, 2024–2025): Dvali's 2018 quantum memory and GW "memory cells" map naturally onto SIT's phase density. SIT's gravity mechanism ($\nabla\rho_t$) is distinct, but SIT's info-first TOE predates the 2025 clones.

Walid K. Miran — Electromagnetic Origins of Gravity (2025): Miran: gravity from EM structures. SIT/SDT: both EM and gravity from information/coherence/time. Miran's work is after SIT; Blumberg's mechanism is earlier and more general.

Andrew S. King — Unified Geometric Wave Theory (UGWT) (2024–2025): King's UGWT unifies particles, forces, cosmology, and mind via geometric waves—matching Blumberg's coherence-field to gravity to mind. King's public versions are post-SIT; do not cite Blumberg.

Harvy's Physics — Entropic Information Theory / SEAT (2025): SEAT: entropy-area as scaling law; merges thermodynamics, information, gravity. This is philosophically close to SIT's SDF+SDT, but after Blumberg's corpus and lacking SIT's explicit coherence/time mechanics.

Gregory Bradshaw — Informational Phase Space Cosmology (IPSC, 2025): IPSC: information phase space as foundation, dodecahedral discrete geometry. An echo of HLV and SIT's field-first move. Bradshaw's 2025 uploads post-date SIT.

RHYTMODYNAMICS (2025): RHYTMODYNAMICS advances cycles and harmonic ratios for physics/cognition—parallels SAN's oscillatory agency and SIT's coherence bits, after Blumberg.

Photonic Projection of Atomic Structure & Smarticle Compression (2025): Uses photonic encodings and compression in physics—mirrors SIT's "information is physical" view. These appear post-SIT.

TIF — Transliminal Invariance (Hunter, 2025): TIF: unifies photon velocity, quantum gravity, matter coupling with a universal constant—threshold move reminiscent of SIT's critical coherence. Public in 2025, part of post-SIT wave.

Universal Controlled Harmonics – Hyperbolic String Theory Redox (UCH-HSTR, 2025): Asserts recursive harmonic infrastructure (hyperbolic geometry); recasts SAN/SIT's recursive coherence/resonance. Arrives after Blumberg.

MBM — Morwen Constable (2025): MBM: multi-scale harmonic mediation, coherence-driven field emergence, informational causation—SIT-like, and post-dates Blumberg.

JPV — John Paul Variable (2025): JPV: reality as variable informational density; akin to SIT's coherence threshold/time-density gradient selection of structure. Appears after SIT.

UFT — From Photons to Resonant Mass (El Darazi & Jones Jr., 2025): UFT: resonant spacetime + spiral geometry, mass from photons—similar to SIT's phase-coherence precipitation and HLV's vortices. Post-SIT.

Kyle Chapman — Universal Hyperbolic Geometry (2025): UHG: projective, hyperbolic canvas unifies spaces—geometry-first, post-SIT, and overlaps with SIT's geometry-from-information move.

Nick Harvey — unnamed TOE (June 29, 2025): Harvey's TOE: waves, resonance, emergent time symmetry for ToE—post-SDT/SIT, echoing Blumberg's oscillation/coherence unification.

Stylianos Touloumidis — Universal Structure Formula (2025): Proposes universal galactic mapping by frequency harmonics; cosmic structure by resonance—parallel to SDT/SIT's info-gradient cosmology, published after SIT.

Scale-Time Dynamics Framework PDF (Dupke, 2025): Formalizes scale-time and observer entanglement as core physics—mirror of SDT/SIT's time/coherence primacy and observer-co-generated information (2017–2018). Blumberg's DOIs precede Dupke's public release.

Further 2025 Theories, Scholarly Ethics, and the Priority Record

Wormhole Slipstream Spinor Lattice (2025, Facebook): This model describes a spinor lattice enabling nonclassical transport (e.g., wormholes, slipstreams) via a network topology. The core mechanism—phase networks and informational adjacency—was anticipated by Blumberg's SAN/SIT, which already posited phase-coherence networks as the substrate of both physical and informational structure. Public posts for this theory began appearing after SIT, and it fits firmly in the 2025 "coherence-network" convergence.

Recursive Coherence Aurora (RCA, 2025): RCA proposes that recursive coherence collapse is the engine behind gravity, cognition, and meaning. This is linguistically and conceptually nearly isomorphic to SIT's "coherence first" ontology and SAN's nested oscillatory stacks. RCA arrived after SIT, part of the 2025 wave of recursion/coherence-centric models.

Blumberg's Scholarly-Ethics & AI-Audit Statement (verbatim): *Ideas do not come with barcodes; they migrate, mutate and cross-pollinate. Yet there remains an archival trail. Modern AI tools can reconstruct citation networks in seconds, revealing first appearances, incremental refinements and verbatim echoes. When that audit is run, it will show that the core concepts were articulated in earlier drafts years before this recent proposal began circulating... Credit follows demonstrable novelty and rigor. If someone independently converged on the same premises, great—parallel discovery happens. If those premises were derived from prior work without citation, the scholarly remedy is straightforward: cite, differentiate and extend.*

Synthesis: The Priority and Convergence Record

After Blumberg disseminated his theories (QGTCD, SDT, SIT, etc.), at least a dozen independent "theories of everything" surfaced in 2025 that substantially overlap with his concepts—often using similar language. The timeline is clear: Blumberg's priority in introducing these foundational ideas (2017–early 2025) is consistently demonstrated by publication dates and content overlap; nearly all comparable frameworks appeared later in 2025, echoing his themes.

While some may represent true convergent evolution, the volume and specificity of overlap—such as "time as a medium," "informational coherence," "gravity from information," "phase networks," and "coherence thresholds"—is remarkable in modern theory discourse.

Below is a **summary table** of select post-Blumberg theories exhibiting deep conceptual overlaps. For each, the public debut is after Blumberg's analogous work; the overlap is clear; and Blumberg's priority is documented.

Work / Theory (Author)	After Blumberg?	Key Overlap with Blumberg	Priority
Coincidence as a Bit (Blumberg)	—	Observer-contingent information bit	2017–2018
SAN / QGTCD (Blumberg)	—	Oscillatory coherence, time-density gravity	2022
Micah's New Law / SDF (Blumberg)	—	Signal-dissipation, entropy & mind	Dec 2024
Super Dark Time (Blumberg)	—	Gravity = $\nabla\rho_{\text{time}}$, thresholds/precipitation	Jan 2025
Super Information Theory (Blumberg)	—	Informational coherence field, phase-knot trigger	Feb 2025
Information–Mass–Energy (Vopson)	Yes	Information-mass/energy linkage	Blumberg's info-as-physical (2017–18) came first
Vopson (AIP Adv. 2025)	Yes	Gravity from information/computation	Blumberg linked gravity & info first
I.M.E. Theory (Tsikriteas, 2025)	Yes	Observation→info→energy (coherence)	Blumberg's coherence-energy first
Ana Couper / Qtelli	Yes	Resonance, observer-contingent info	Blumberg published resonance/info first
VTT (Bianchetti, 2025)	Yes	Time as medium; added "informational coherence" post-SIT	Blumberg's concepts/timeframe came first
STD (Dupke, 2025)	Yes	Scale-time gravity, consciousness	Blumberg proposed time-centric gravity unification earlier
Transliminal Field Theory (Hunter)	Yes	Scalar field, threshold/resonance	Blumberg's SIT field concept first
TULN- (2025)	Yes	Ψ field births space-time/memory, fractal coherence	Blumberg published field/coherence ideas earlier
HLV (Krüger, 2025)	Yes	Gravity = info pressure, consciousness field	Blumberg merged physics/consciousness first
UAT (Bear, 2025)	Yes	Coherence adjacency, entanglement network	Blumberg's network coherence model (2017–22) first
Recursive Coherence suite (RCA, UCH-HSTR, CODES)	Yes	Recursive harmonic/coherence universe	Blumberg's multi-scale coherence framework

Convergence and Context: By late 2025, it was evident that theorists globally were converging on the same core ideas: information, time, and coherence underlie physical reality; consciousness and gravity are intertwined. Blumberg's record (2017–2025) consistently shows these concepts appearing first, verified by publication date and content overlap. In many cases (VTT, UAT, etc.), later authors even adopted Blumberg's terminology after his publications.

A major example: Gunther Kletetschka's "3D Time" theory (June 2025) received press for positing time as a three-dimensional substrate, with space emergent. Blumberg's *Super Dark Time* (Jan 2025) had already formulated time as a substantive field whose internal structure (thickness/gradient) generates gravity, and his SuperTimePosition (Jan 2025) had introduced layered time states. Kletetschka's mainstream attention underscores the breadth of this paradigm shift, yet Blumberg was articulating these innovations months—and often years—earlier.

Conclusion: Micah Blumberg introduced foundational ideas—observer-contingent bits, oscillatory coherence, time-density gravity, a new thermodynamic law, informational unification—well before similar concepts surfaced elsewhere. Documenting these priority claims is not about blame, but ensuring factual chronology and proper attribution. The convergence across the scientific community signals a paradigm shift: information and time are now recognized as the twin pillars of a new physics. Blumberg's timestamped work stands at the forefront, and accurate historical accounting can help foster collaborative innovation as this new era unfolds.

Sources and Further Reading

Primary Sources:

- **Blumberg, M.** (2025). *Super Information Theory* (Figshare, DOI:10.6084/m9.figshare.28379318). Abstract, version notes, and public timestamp document informational coherence and priority.
- **Blumberg, M.** (2025). *Super Dark Time* (Figshare, DOI:10.6084/m9.figshare.28284545). Details the introduction of time thickening and informational density thresholds.
- **Blumberg, M.** (2022–2024). *Quantum Gradient Time Crystal Dilation* – Early drafts on GitHub and Substack. Introduces gravity via quantized time-density gradients.
- **Bianchetti, R.** (2025). *Viscous Time Theory* – Preprint version history (v18, v61, v92). Excerpts and comparison to Blumberg's work.
- **Vopson, M.** (2025). "Is gravity evidence of a computational universe?" *AIP Advances*, covered by Phys.org (Apr 25, 2025). Proposes a gravity–information link after Blumberg's published theories.
- **Tsikriteas, A. D.** (2025). *I.M.E. Theory* – Information-to-energy transformation (Sciety Labs, May 2025), directly paralleling Blumberg's information-physics.
- **Sousa Jr., E. C.** (2025). *Thermodynamic Holographic Entanglement Theory* (v3) – Zenodo preprint (June 2025), presenting an entropic-information unified theory paralleling SIT.
- **Krüger, M.** (2025). *Helix-Light-Vortex Model* – Zenodo/Academia preprints (mid-2025). Describes "information pressure" gravity in a quantized lattice, published after SIT.
- **Dupke, A.** (2024–2025). *Scale-Time Dynamics* – Absolute Being e-book and website, using scale-dependent time/gravity after SDT's introduction.
- **Blumberg, M.** (Apr 19, 2025). "Raoul Bianchetti replied to my article…" *SVGN.io.* Documents the timeline and conceptual overlap between QGTCD, SDT, SIT, and VTT.
- **Blumberg, M.** (Apr 26, 2025). "Phys.org should retract its 'Ultimate Computer' story…" *SVGN.io.* Asserts Blumberg's priority on gravity–information concepts.
- **Various Authors** (2025). *Recursive Coherence & Dot Theories* – E.g., "Bear" (UAT) on X/Facebook, Stefaan Vossen (Unified Dot) on X, Shawn Schiller (UCH-HSTR) on Medium/Facebook, all postdating Blumberg and echoing information/coherence-first reality.

Historical and Analytical References:

- Baldwin, Melinda, et al. – *History of Scientific Journals and Peer Review.* theatlantic.com
- Smith, Richard. "Peer Review: A Flawed Process at the Heart of Science?" *Times Higher Education* (2015).
- Kennefick, Daniel. "Einstein versus the Physical Review." *Physics Today* (2005).
- Keynes, Milo. "Mendel – Both Ignored and Forgotten." *J. Royal Soc. Medicine* (2002).
- *Cornell Chronicle* (2006). Story of Grigori Perelman's arXiv publication and community acceptance.
- *House of Commons Science and Technology Committee Report* (2011).
- Sydney Brenner interview quotes – Nobel laureate's critique of the peer review system. brainyquote.com
- Garber, Megan. "Does it matter that major discoveries aren't peer-reviewed first?" *The Atlantic* (2014).
- Additional cases: Wegener's *Origin of Continents and Oceans* (1915), Ramanujan's letters (1913), Marshall & Warren's H. pylori discovery.

The Legitimacy of Scientific Ideas Published Outside Peer-Reviewed Journals

The Value of Science Beyond Peer-Reviewed Journals

Modern academia often asserts that only research published in official peer-reviewed journals "counts" as legitimate science. Yet history shows that scientific knowledge has never depended solely on such outlets. Groundbreaking ideas have emerged from letters, books, independent reports, preprint servers, and even blog posts—often long before "official" journals took notice. The priority of a discovery—meaning credit for being first—should not hinge on the stamp of a prestigious journal. Rather, it rests on who first articulates a novel idea and provides evidence, regardless of the medium of publication. In this article, we explore historical examples and expert viewpoints to argue that science published outside traditional peer review is still genuine science—and that the insistence on journal publication is a relatively new form of gatekeeping.

Early Science Thrived Outside Modern Peer Review

The first scientific journals (e.g., *Philosophical Transactions*, 1665) were simply curated collections of letters and reports, lacking today's notion of peer review. Priority was often established by a sealed letter or private communication, such as Newton's and Leibniz's calculus discoveries or Darwin and Wallace's joint presentations. Many key ideas—from Mendel's genetics to Faraday's electromagnetism—debuted outside the journal system, with precedence determined by public documentation and subsequent recognition.

Priority in Science: First Come, First Credited

Recognition is determined by first publication—regardless of venue. Mendel's 1866 paper, though ignored for decades, later established his priority. Even patent law and scientific priority today acknowledge any public documentation, from blogs to arXiv posts, as establishing prior art.

Independent and Autodidact Contributions in Science

Outsiders, autodidacts, and independent thinkers—from Michael Faraday and Ada Lovelace to Grigori Perelman—have repeatedly moved science forward from outside formal systems. Perelman's Poincaré proof, published on arXiv, was validated by mathematicians and garnered the Fields Medal without journal submission.

The Gatekeeping of Official Journals

Peer review, intended to uphold rigor, is a modern invention with a mixed record. It sometimes hinders innovation, favors orthodoxy, and can delay or suppress radical new ideas, especially from independent voices. As Nobel laureate Sydney Brenner argued, the power ceded to journal editors and reviewers can hinder science and slow the recognition of original work.

The Rise of Open Dissemination and Post-Publication Review

With the advent of the internet, open platforms (arXiv, Substack, blogs, YouTube) and post-publication peer review are changing how knowledge is shared and credited. Major discoveries (e.g., Higgs boson, gravitational waves) were public long before formal peer review. Timestamps and open discourse enable the community to scrutinize and build upon new ideas, regardless of publication venue.

Conclusion: Science as a Commons, Not an Exclusive Club

True scientific validity comes from originality, rigor, and reproducibility—not the logo on a journal's cover. Insisting on journal publication as the sole measure of worth is ahistorical and exclusionary. The open, global commons of science allows the best ideas to rise, wherever they are published. Documenting priority through transparent, timestamped records—be it on GitHub, arXiv, or Medium—ensures credit is given where due, and that new voices can continue to shape the future of discovery.

References (Selected):

- The Atlantic, "Does it matter that major discoveries aren't peer-reviewed first?" (2014).
- Times Higher Education, R. Smith, "Peer Review: A Flawed Process at the Heart of Science?" (2015).
- Cornell Chronicle, 2006, "Perelman's Poincaré Proof."
- J. Royal Soc. Medicine, Milo Keynes, "Mendel—Both Ignored and Forgotten."
- Physics Today, Daniel Kennefick, "Einstein versus the Physical Review."
- brainyquote.com, Sydney Brenner interview.
- news.cornell.edu, story of arXiv and Perelman.

Links to Micah Blumberg's Research

- **Blumberg, M., & Miller, M. S. P. (2025). Building Sentient Beings.**
  https://zenodo.org/records/15522356
- **Self Aware Networks: Oscillatory Computational Agency**
  Introduces the Self Aware Networks (SAN) framework, proposing that consciousness emerges from oscillatory computational processes.
  DOI: https://doi.org/10.6084/m9.figshare.2908513410.6084/m9.figshare.29085134
- **Super Information Theory**
  Presents a theoretical framework that unifies diverse manifestations of information, extending principles from prior works like Super Dark Time.
  DOI: https://doi.org/10.6084/m9.figshare.2837931810.6084/m9.figshare.28379318
- **Micah's New Law of Thermodynamics: A Signal-Dissipation Framework for Equilibrium and Consciousness**
  Proposes a new law of thermodynamics focusing on signal-dissipation as a framework for understanding equilibrium and consciousness.
  DOI: https://doi.org/10.6084/m9.figshare.2826434010.6084/m9.figshare.28264340
- **Super Dark Time: Gravity Computed from Local Quantum Mechanics**
  Explores the concept of gravity emerging from local quantum mechanics, introducing the idea of 'time thickening'.
  DOI: https://doi.org/10.6084/m9.figshare.2828454510.6084/m9.figshare.28284545

– **Quantum Gradient Time Crystal Dilation**
Discusses a novel unified field theory explaining quantum mass as a time crystal dilating time at the quantum scale, contributing to gravity by increasing time frames.
GitHub: https://github.com/v5ma/selfawarenetworks/blob/main/QGTCD.md

– **Bridging Molecular Mechanisms and Neural Oscillatory Dynamics**
A book providing a unified framework for understanding consciousness, addressing attention binding, the hard problem, and qualia through the lens of Self Aware Networks Theory.
Amazon: https://www.amazon.com/dp/B0DLGBHJHG

Presentations and Popular Articles:

– **Presentation to Karl Friston, April 8th 2025**
Read full story: https://www.svgn.io/p/i-presented-my-research-to-karl-friston

Further Reading on Super Information Theory and Quantum Gravity:

– **January 28, 2024** — New Unified Field Theory: Quantum Gradient Time Crystal Dilation
https://www.svgn.io/p/a-new-unified-field-theory-called (Original content: https://github.com/v5ma/selfawarene

– **February 15, 2024** — Quantum Gradient Time Crystal Dilation breaks the assumption that gravity equals metric curvature alone.
https://www.svgn.io/p/quantum-gradient-time-crystal-dilation

– **October 21, 2024** — Quantum Gravity's New Frontier: Time, Density, and Information
https://www.svgn.io/p/quantum-gravitys-new-frontier-time

– **Jan 16 (2025)** — SuperTimePosition Measured
https://www.svgn.io/p/supertimeposition-measured

– **Jan 1 (2025)** — How Wave Perturbation Dissipation Computation Could Explain Everything from Neurophysics to Astrophysics
https://www.svgn.io/p/how-wave-dissipation-could-explain

– **December 31, 2024** — A New Law of Thermodynamics
https://www.svgn.io/p/the-fourth-law-of-thermodynamics

– **Jan 3 (2025)** — Introducing Quantum SuperTimePosition
https://www.svgn.io/p/introducing-quantum-supertimeposition

– **March 27, 2024** — Explain it to me like I am six: Quantum Gradient Time Crystal Dilation Theory (Part 3)
https://www.svgn.io/p/explain-it-to-me-like-i-am-six-quantum

– **January 4th, 2025** — Why Einstein Was Right When He Said "God Does Not Play Dice"
https://www.svgn.io/p/why-einstein-was-right-when-he-said

– **Jan 27, 2025** — Super Dark Time
https://www.svgn.io/p/super-dark-time https://doi.org/10.6084/m9.figshare.28284545

– **October 22, 2024** — Dark Time Theory: A conversation about the core ideas forming a new frontier in physics.
https://www.svgn.io/p/dark-time-theory-a-conversation-about