MAGIC
Science of the Cosmos

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The Universe as a Grand Computational System

The Grand Computational System proposes a unifying framework in which mass, gravity, time, and consciousness emerge from a quantum information processing substrate. Rather than treating spacetime as a static background and mass as intrinsic, this model views the universe as a dynamic computational engine, where energy is processed through entropy driven interactions and encoded into spacetime via structured photonic emissions. Spacetime processes information, it is a 2D holographic (reflective) Surface (Boundary) which is also known as the observer itself. Consciousness arises from the self reflection of projecting reality. Key to this theory is an observer-based correction to the Bekenstein Bound, asserting that information is encoded only across the observer-accessible plane, not the full 2D boundary. A case study using a 1 kg steel cube introduces a square root correction to photon emission data, allowing a derivation of Einstein's equation ($E = mc^2$) [Einstein, 1905] from quantum information principles and thermodynamics. Mass is reconceptualized as structured light, and inertia as resistance to information restructuring. Gravity emerges not as a force, but as a computational constraint that adjusts spacetime curvature to optimize information flow. Black holes are framed as nodes of information restructuring, resolving the information paradox by treating Hawking radiation as an encoded, non-thermal emission. Time arises from quantum update cycles, and its directionality is tied to entropy accumulation. Consciousness is modeled as a non-local interaction between the brain and the quantum information field, with subjective experience emerging from entangled informational states. The theory unifies classical and relativistic physics through information and entropy, offering testable predictions in quantum computing, gravitational anomalies, and consciousness studies. In essence, this framework recasts reality as a holographic, self-regulating quantum information system governed by entropy, light, and observation.

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