Name	Symbol	Type	Description and Role
Chronos-time	τ	Relative / Measurable	Sequential time; proper time experienced by localized systems in motion through the æther. Core for modeling time dilation.
Aithēr-time	$\mathcal{N}$	Absolute / Universal	The invariant universal present; a metaphysical and ontological background for all temporal flow.
Swirl Clock	$\circlearrowleft$ or $S(t)$	Local / Cyclical	Internal clock-like rhythm of a vortex knot. Tracks phase, rotation, or identity shift through time.
Kairos Moment	$\mathbb{K}$	Threshold / Emergent	The qualitative, transformational moment when a system undergoes critical phase alignment or collapse.
Æther Frame	Ξ_0	Reference Frame	Hypothetical inertial frame where the æther medium is at rest. Used for symmetry-breaking and baseline flow analysis.
Vortex Proper Time	T_v	Derived / Topological	Time internal to the closed knot or vortex loop. Emerges from geodesic paths and twist topology.
Now-Point	ν_0	Local Event / Temporal Slice	Precise location in spacetime where a point in the æther intersects the universal present. Useful in field causality.

Table 1: Temporal constructs used in the Vortex Æther Model. These notations distinguish between measurable time, absolute background time, internal vortex phase, and field-causality moments.

(1) Vortex Proper Time Evolution: (1)

$$\frac{\mathrm{d}\tau}{\mathrm{d}\mathcal{N}} = \gamma^{-1}(\vec{v}) \tag{2}$$

(2) Swirl Clock Gradient: (3)

$$\nabla S(t) = \frac{\partial \vec{S}}{\partial \mathcal{N}} + \omega(\tau)\hat{n} \tag{4}$$

(3) Field Tensor Modulation (Æther-relative): (5)

$$F^{\mu\nu}(\Xi_0) = \partial^\mu A^\nu - \partial^\nu A^\mu + \phi(\circlearrowleft)\delta^{\mu\nu} \tag{6}$$

(4) Ætheric Causality Surface: (7)

$$\Sigma_{\nu_0} = \{x^\mu \mid \tau(x) = \mathcal{N}\} \tag{8}$$

(5) VAM Energy Conservation in Æther Frame: (9)

$$\frac{\mathrm{d}E}{\mathrm{d}\mathcal{N}} + \nabla \cdot \vec{J} = \mathbb{K}(\vec{x}, \tau) \tag{10}$$