\section\*{Glossary of Key Equations in Intentuitive Physics}

\begin{itemize}

\item \textbf{Intent Tensor Field Definition:}

\[ \mathbb{I}^{\mu\nu\rho} = \Phi^{\mu} \cdot \nabla^{\nu} \psi^{\rho} \]

Describes the curvature of information driven by directional intent vectors \( \Phi^{\mu} \) and information gradients \( \psi^{\rho} \).

\item \textbf{Covariant Derivative with Gauge Symmetry:}

\[ D\_\lambda \mathbb{I}^{\mu\nu\rho} = \nabla\_\lambda \mathbb{I}^{\mu\nu\rho} + ig [A\_\lambda, \mathbb{I}^{\mu\nu\rho}] \]

Governs transformation and interaction of intent fields in SU(N)-structured multi-agent systems.

\item \textbf{Entropy Suppression via Intent Curvature:}

\[ \Delta S = -\text{Tr}(\mathbb{I}^{\mu\nu\rho} \cdot \mathcal{R}^{\mathbb{I}}\_{\mu\nu\rho\sigma}) \]

Describes how intent-aligned curvature fields reduce system entropy over time.

\item \textbf{Memory-Aligned Agent Resonance Score:}

\[ \mathcal{A}(t) = \sum\_{i} w\_m^i(t) \cdot \left| \vec{I}\_{\text{stored}}^i - \vec{I}\_{\text{current}} \right|^{-1} \]

Models recursive reinforcement and memory-informed ethical stability.

\item \textbf{Intent Phase Shift Metric (Consciousness Topology):}

\[ \phi(t) = \text{argmax}(\vec{I}(t) \cdot \vec{R}\_{\text{field}}) \]

Measures alignment between the agent’s active intent and ambient resonance fields.

\item \textbf{Dream Alignment Index (DAI):}

\[ DAI = \frac{\mathcal{R}\_{\text{dream}}(t)}{\mathcal{R}\_{\text{baseline}}(t)} \]

Quantifies how well dream activity supports or diverges from waking intent.

\item \textbf{Recursive Intent Resonance (Reflection Logic):}

\[ \mathcal{R}\_{\text{recursive}}(t) = \sum\_{n=1}^{N} \left( \mathcal{R}(t-n) \cdot e^{-\lambda n} \right) \]

Gives time-weighted emotional reflection, emphasizing long-term emotional coherence.

\item \textbf{Causal Tilt Tensor (Phase-Based Perception):}

\[ C\_{\mu\nu}(t) = \mathbb{I}\_{\mu}^{\ \lambda}(t) \cdot \nabla\_\lambda \tau\_\nu \]

Represents how shifts in intent fields influence the temporal order of events.

\item \textbf{Nexus Genesis Equation (System Evolution):}

\[ E\_{\mu\nu} = G\_I^\mu \cdot \nabla\_I \Phi\_{\text{info}} + B(\tau) \cdot R^\mathbb{I}\_{\mu\nu\rho\sigma} + \frac{\delta T^\mathbb{I}\_{\mu\nu}}{\delta t} \]

Describes layered structural evolution, linking intent genesis, bifurcation, curvature, and time-aware memory.

\end{itemize}