

Core Law of the Theory of Dynamic Symmetry (TDS)

Postulate. The Reversible Symmetry Lattice (RSL) evolves at the Planck scale as a closed, information-preserving system. Its dynamics obey the bijective update rule and the fundamental balance between symmetry and asymmetry:

$\text{RSL: } a = \ell_P, \quad \tau = t_P, \quad s_i \in \{-1, +1\},$ $S_{t+1} = B S_t, \quad B^{-1} \text{ exists,}$ $I_{\text{total}} = H(S_t) = \text{const},$ $E_{\text{sym}}[S_t] + E_{\text{asym}}[S_t] = E_0 = \text{const},$ $E_{\text{sym}} = J \sum_{\langle ij \rangle} [s_i s_j]_+, \quad E_{\text{asym}} = J \sum_{\langle ij \rangle} [-s_i s_j]_+,$ $\frac{dE_{\text{sym}}}{dt} = -\frac{dE_{\text{asym}}}{dt}, \quad \frac{d}{dt}(E_{\text{sym}} + E_{\text{asym}}) = 0,$ $J > 0, \quad [x]_+ = \max(x, 0).$

This equation expresses both the reversible equilibrium and the mutual conversion of symmetry and asymmetry within the informational substrate.