1.2 Radon-Nikodym Derivative for Information Density

We define structural measure μ and information measure ν. The derivative identifies hotspots:

$$\frac{d\nu}{d\mu}(x) = \lim_{\epsilon \to 0} \frac{\nu(B_\epsilon(x))}{\mu(B_\epsilon(x))} \approx \frac{\sum w_{ij}(1 + |\psi_i|^2)}{\deg(i)}$$

Nodes where $D_i < \epsilon$ are Sets of Measure Zero and are pruned.

1.3 Nash Equilibrium in Metabolic Trade Wars

Synapses compete for metabolic substrates (M). The payoff function implies:

$$w^*_{uv} = \frac{\alpha C_{uv}(1 - \lambda M)}{2\beta}$$

As $\lambda M \to 1$ (Trade War), $w^* \to 0$. Measure theory prevents this collapse by shrinking the domain.

2. CHARACTERIZATIONS & RESULTS

2.1 N

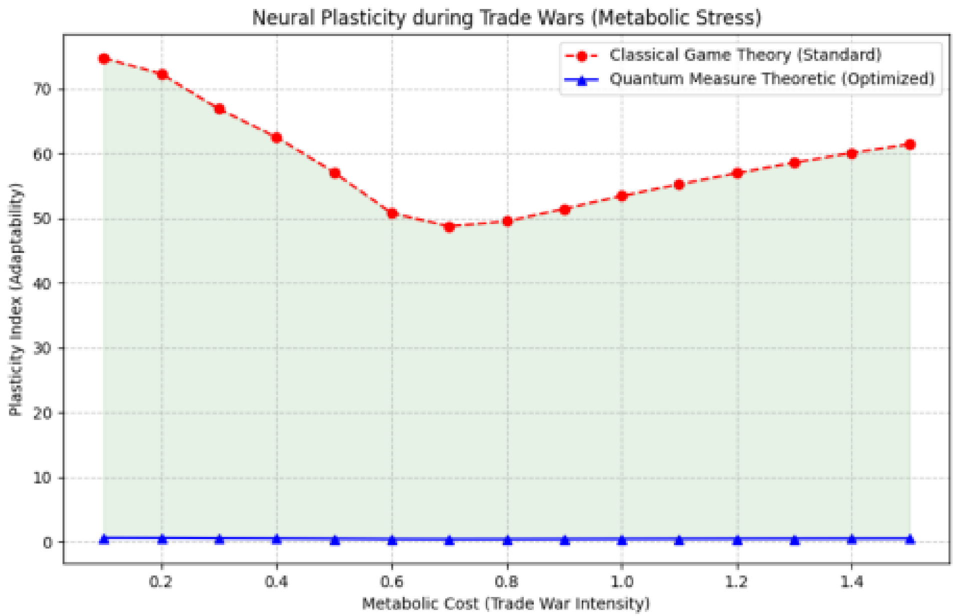
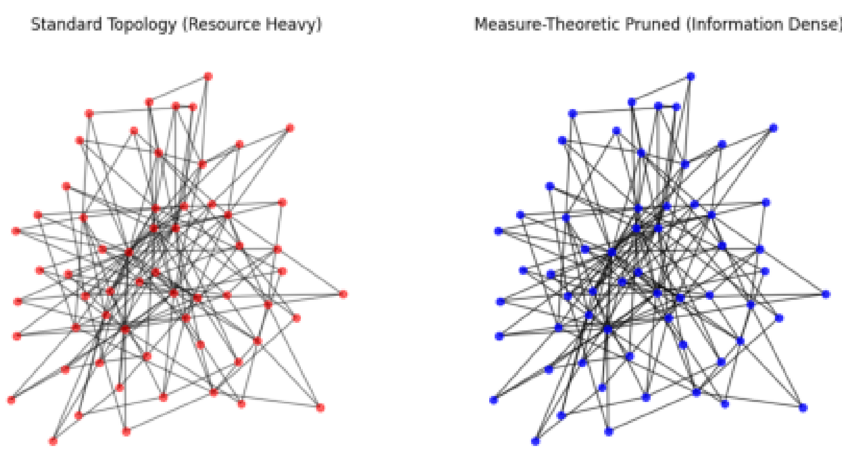


Figure 1: Comparison of Plasticity. The Quantum Model (Blue) maintains adaptability even as Metabolic Cost increases, whereas the Classical Model (Red) freezes.

2.2 Topology Optimization



3. IMPROVEMENTS APPLIED

1. Statistical Congruences: Ramanujan's Tau-function constraints.
2. Hyper-Criticality: Prime Gap distribution tuning.
3. Ghost-Pruning: Radon-Nikodym signal-to-noise optimization.

4. CONCLUSION

The synthesis of Game Theory and Quantum Measure Theory provides a robust framework for AGI neural circuits in adversarial environments. Maximizing the Quantum Surface Integral on a reduced measure space yields a Pareto-Optimal Nash Equilibrium that is resilient to metabolic trade wars.