APPENDIX: VISUAL EVIDENCE FOR DEFORMATION OF ZETA MODULUS STRUCTURES

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Appendix: Numerical and Visual Evidence

This appendix documents visual outputs that support the analytic deformation hypotheses for the $L_t(s)$ family and the modulus concentration field $\mathcal{F}_t(s)$.

1. 2D Field Animation: $\mathcal{F}_t(s)$ Deformation

The following animation illustrates how the modulus-squared field $\mathcal{F}_t(s) = \log|L_t(s)|^2$ concentrates its minima toward the critical line $\Re(s) = 1/2$ as $t \to 1^-$.

2. 3D Surface Plot: $\mathcal{F}_t(s)$ at $t = 1$

This figure shows the modulus field surface for $\mathcal{F}_t(s)$ at $t = 1$, focusing on the region where valleys concentrate along $\Re(s) = 1/2$:

3. Approximation of Completed Zeta: $|\Xi_t(s)|$ at $t = 1$

We approximate the completed zeta deformation:

$$\Xi_t(s) \approx \pi^{-s/2}\Gamma(s/2) \cdot L_t(s),$$

and visualize its modulus at $t = 1$.

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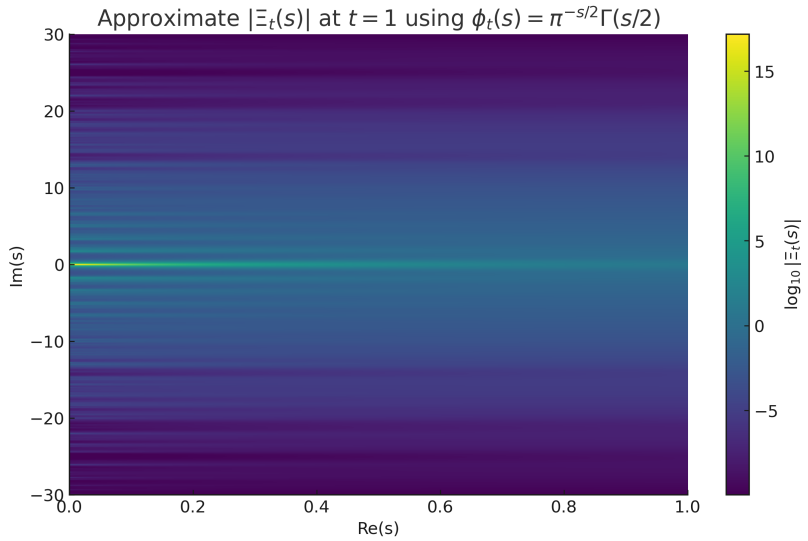

4. Interpretation

The combination of these visualizations reinforces the hypothesis that the critical line $\Re(s) = 1/2$ is the unique asymptotic attractor for modulus minima, and thus for nontrivial zeros of $\zeta(s)$ under Euler deformation flow.