# Appendix: Mathematical Derivations for Recursive Kernel Model (Ilianne’s Law)

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## 1. Recursive Kernel Formalism

Let the field ψ(x, t) evolve under a memory-integrated operator:

\[

\psi(t) = \psi\_0 + \int\_0^t K(t - t') \psi(t') \, dt'

\]

Where \( K(t - t') \) is the memory kernel representing recursive feedback. The system becomes non-Markovian and history-dependent.

... (truncated for brevity; full content will be included in the actual document)