

MU Test Plan — Test 7 (\hbar -Variation at $\beta=9$ & $\beta=10$)

Goal

To test how the survival weights respond when the “quantum noise scale” (\hbar) is varied, both at the **critical threshold ($\beta=9$)** and the **post-threshold macroscopic region ($\beta=10$)**.

Parameters

- **gamma:** 1.0
 - **betas tested:** 9.0 (near threshold) and 10.0 (post-threshold)
 - **hbar values tested:** 0.05, 0.1, 0.2
 - **velocities tested:** $v = 0.050$ (slow), $v = 0.500$ (fast)
 - **selector form:** $T(r) = \frac{1}{1 + |r - r_c|}$, $r_c = 0.25$
 - **integration window:** 1.0
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Predictions

- **At $\beta=9.0$:**
 - $\hbar=0.05 \rightarrow$ survival suppressed ($\sim 10^{-12}$ or smaller).
 - $\hbar=0.1 \rightarrow$ survival $\sim 10^{-5}$ (as already seen).
 - $\hbar=0.2 \rightarrow$ survival stronger ($\sim 10^{-2}$ to 10^{-1}).
- **At $\beta=10.0$:**
 - $\hbar=0.05 \rightarrow$ survival weight smaller than 0.3 but still macroscopic ($\sim 10^{-2}$).
 - $\hbar=0.1 \rightarrow$ survival ~ 0.3 (from Test 4b).
 - $\hbar=0.2 \rightarrow$ survival larger, possibly close to ~ 0.8 or 1.0 .
- **Fast path:** Should remain annihilated in all cases.
- **Interpretation:**
 - If the *threshold* β is roughly unchanged across \hbar , then the MU law is **universal**.
 - If the threshold shifts, then Truth's amplification and noise scale compete directly.

