📓 MU Simulation Log — Test 2 (Simple $T(r)$)

Introduce the selector $T(r)$ into the weight calculation to test whether it can prevent collapse at the fold.

- In Test 1, both branches collapsed to zero → no survival.

- With $T(r)$, the expectation is that **one branch will remain alive** near the fold, showing the first MU-style selection.

We'll use the simplest possible form of $T(r)$:

$$T(r) = \frac{1}{1 + |r - r_\text{c}|}$$

with $r_\text{c} = 0.25$ (the fold).

Interpretation:

- Close to the fold ($r \approx r_\text{c}$), T is strong.

- Away from the fold, T fades out.

- This gives maximum influence where the classical model fails, and minimal interference elsewhere.

Keep the baseline parameters:

```
gamma  = 1.0
eps    = 1e-6
hbar   = 0.1
Twindow = 1.0
```

- **Without T:** both branches → weights = 0, ratio = nan.

- **With T:** at least one branch survives → weight nonzero.

- **Plots:**

  - Log weight plot should show separation instead of collapse.

- grr plot unchanged (geometry still flips), but the weight plots no longer vanish at the portal.

- This would be the **first positive evidence** that MU can resolve the fold mathematically.