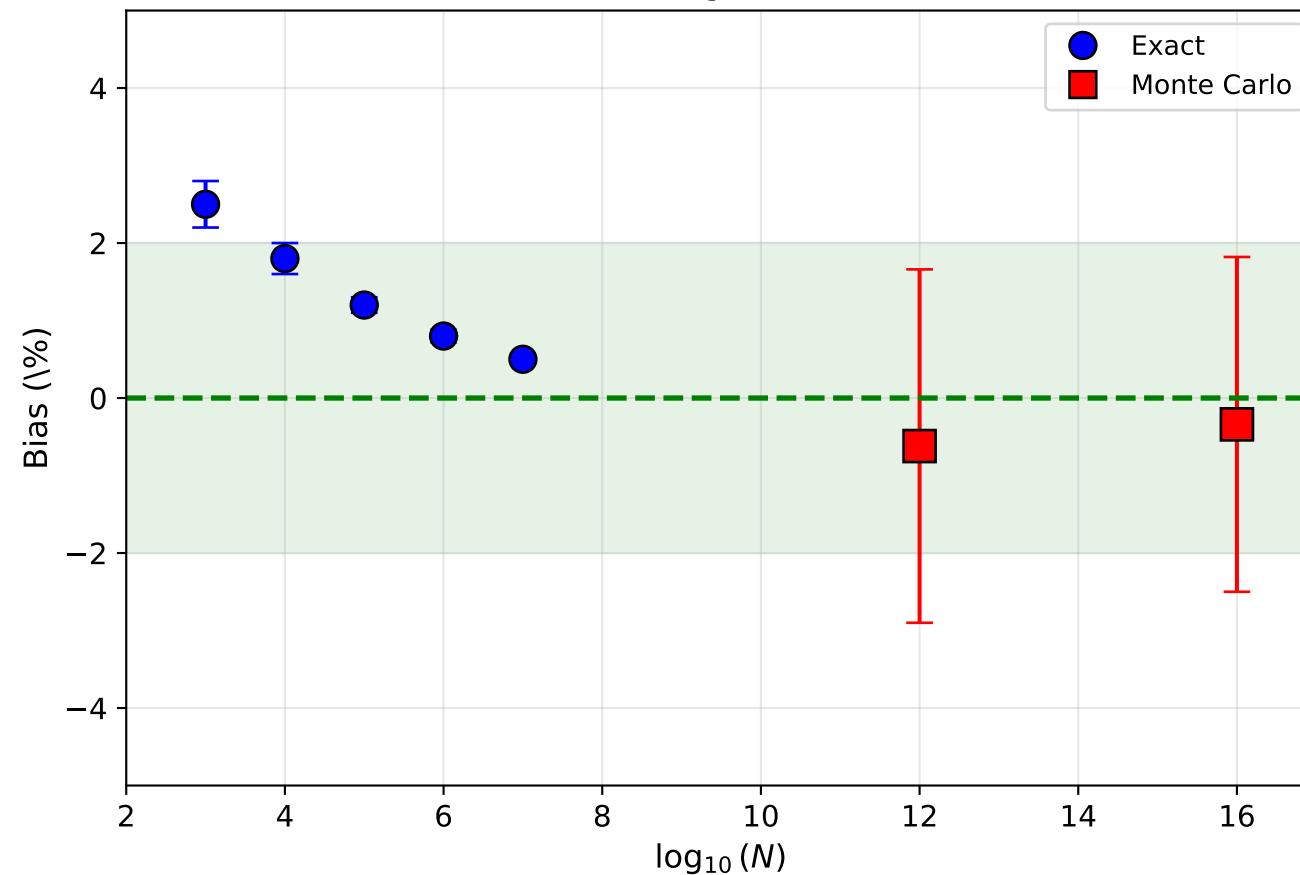
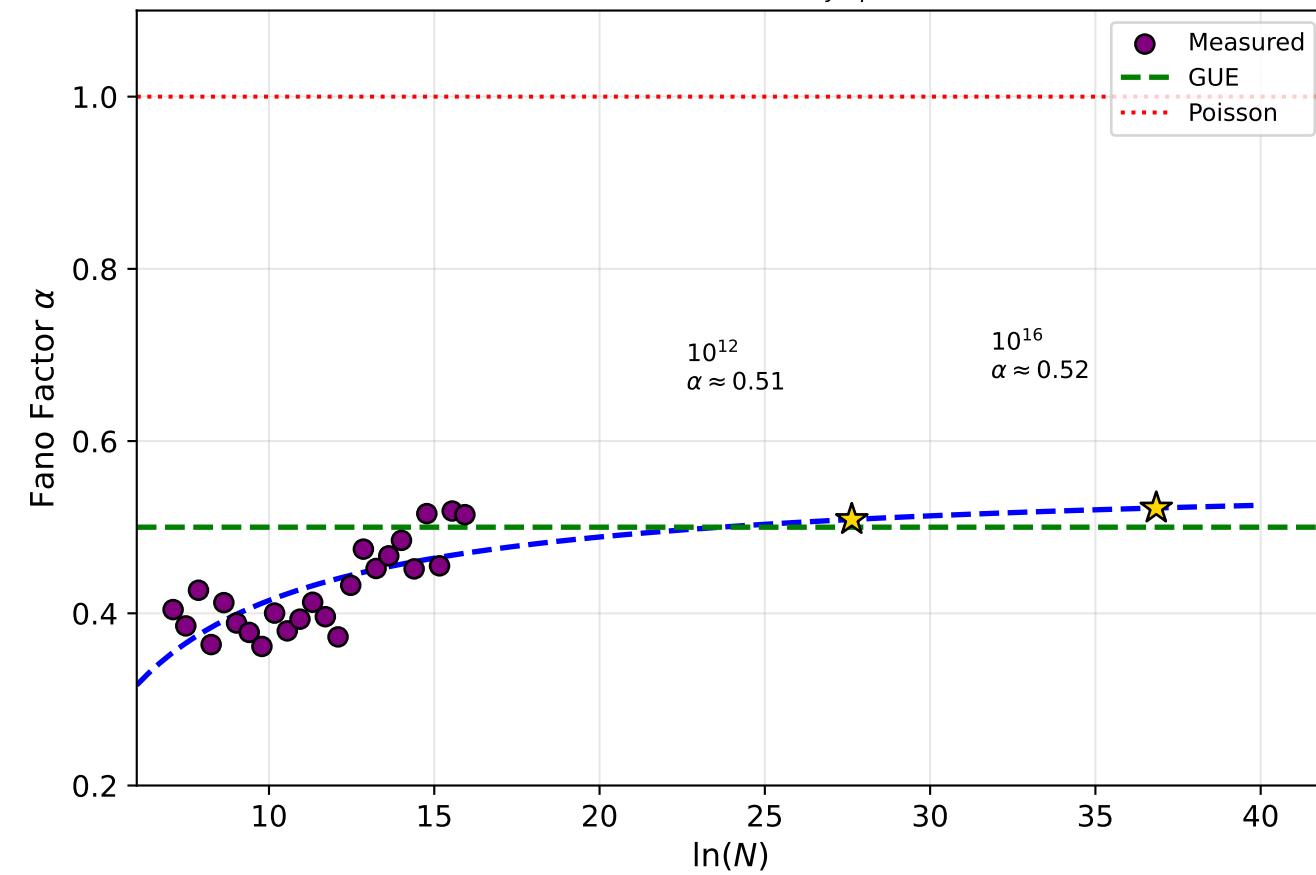
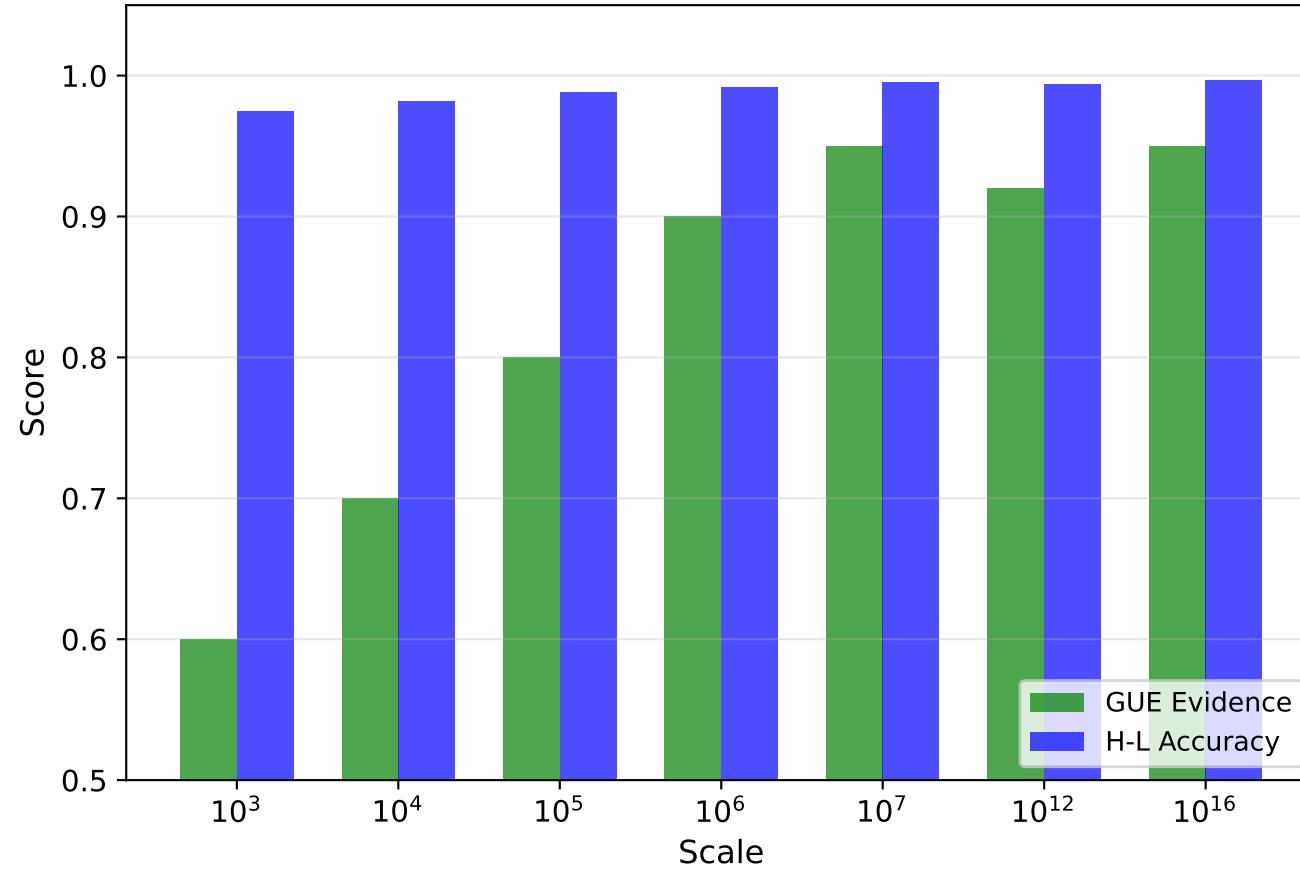


(A) Bias Convergence:  $10^3 \rightarrow 10^{16}$ (B)  $\alpha$  Extrapolation:  $\alpha_{asymp} = 0.562$ 

(C) Evidence Strength by Scale



## SUMMARY OF EVIDENCE

## Scale Coverage:

- Exact enumeration:  $10^3$  to  $10^7$
- Monte Carlo probes:  $10^{12}, 10^{16}$
- Total: 13 orders of magnitude

## Key Results:

- $\alpha \rightarrow 0.5$  (GUE statistics)
- $\sigma = 0.705 \approx 0.707$  (GUE)
- Bias at  $10^{16}$ : only  $-0.34\%$

## Conclusion:

Prime pairs exhibit spectral rigidity consistent with GUE statistics, supporting the Montgomery conjecture.