

# **Time Evolution of Intermittency in the Passive Slider problem**

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How does a steady state with strong intermittency develop in time from an initial state which is statistically random? For passive sliders driven by several types of fluctuating surfaces, we show that the approach involves an indefinitely growing length scale which governs scaling properties. A simple model of sticky sliders suggests scaling forms for the time-dependent flatness and hyperflatness, both measures of intermittency, and these are confirmed numerically for passive sliders driven by a Kardar-Parisi-Zhang surface. Aging properties are studied via a two-time flatness. We predict and verify numerically that the time-dependent flatness is, remarkably, a non-monotonic function of time, with different scaling forms at small and large time. The scaling description remains valid even when clustering is more diffuse, as for passive sliders driven by an Edwards-Wilkinson surface.

**Reference:** Tapas Singha and Mustansir Barma, preprint