



S 4. Fig. **Metrics of the structured activity vs synaptic time decay.** a) Metrics entering in the definition of Q_0 and their dependence from τ_α . From top to bottom: Averaged coefficient of variation $\langle CV \rangle_N$, standard deviation of the cross-correlation matrix $\sigma(C)$, and the fraction of active neurons n^* . b) ΔM_d as a function of τ_α . The system is left to evolve during 10^7 spikes, after discarding 10^5 transient spike events. Parameters here used $\Delta V = 5$ mV, $g = 8$, $K = 20$, $N = 400$.