Moments of other random multiplicative functions

Random multiplicative functions naturally serve as models for oscillatory deterministic ones such as the Mobius function. After fixing a particular random model, there are many interesting questions one can ask. For example, what is the distribution of their partial sums? Harper has recently made remarkable progress for partial sums of certain random multiplicative functions with values that lie on the complex unit circle. He settled the correct order of magnitude of their $q$th moments for all real $q \geq 0$ and surprisingly established that one expects better than square-root cancellation in their partial sums. I will discuss progress on extending Harper’s analysis to a wider class of multiplicative functions such as those modeling the coefficients of higher degree $L$-functions.