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Nathan Glatt-Holtz, Vincent Martinez and Geordie Richards*

(geordie.richards@usu.edu). *Asymptotic coupling and unique ergodicity for damped stochastic KdV.*

We will review a straightforward asymptotic coupling strategy for establishing uniqueness of the invariant measure for stochastic PDEs. As a novel application, we will provide a concise proof of unique ergodicity for damped stochastic KdV with essentially elliptic stochastic forcing, employing a "nudging" strategy which has also been useful in data assimilation problems. This is a joint work with Nathan Glatt-Holtz (Tulane) and Vincent Martinez (Hunter). (Received August 31, 2020)