1107-60-83 Yuri Bakhtin* (bakhtin@cims.nyu.edu). Burgers equation in noncompact setting with space-continuous kick forcing.

Ergodic theory of randomly forced space-time homogeneous Burgers equation in noncompact setting has been developed in a recent paper by the speaker with Eric Cator and Kostya Khanin. There, the analysis is based on last passage percolation methods that allow to prove existence of a field of coalescing one-sided minimizers and construct the global solution via Busemann functions. We extend this theory to the case of space-continuous kick forcing. In this setting, the minimizers do not coalesce, so for the ergodic program to go through, one must use new soft results on their behavior to define generalized Busemann functions along appropriate subsequences. (Received January 01, 2015)