1145-34-2144 Magdalena Czubak* (czubak@math.colorado.edu). Almost sure boundedness of iterates for semilinear wave equations.

We study nonlinear wave equations in 2D with quadratic derivative nonlinearities with random initial data in the energy space. We obtain a uniform time interval on which the Picard iterates of all orders are almost surely bounded. This is in contrast to the deterministic results. (Received September 24, 2018)