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Sivaditya Kaligotla (kaligot1@usc.edu), Department of Mathematics, USC, 3620 S. Vermont Av. KAP 108, Los Angeles, CA 90089, and **Sergey Lototsky*** (lototsky@usc.edu), Department of Mathematics, USC, 3620 S. Vermont Av., KAP 108, Los Angeles, CA 90089. *A stochastic Burgers equation: Bringing together chaos expansion, embedding theorems, and Catalan numbers.*

A special stochastic perturbation of the Burgers equation is considered. The nature of the perturbation is such that the solution is not square-integrable, and the growth of the norms at different stochastic scales is described by the Catalan numbers. Many similar equations with quadratic nonlinearity exhibit the same behavior. (Received August 16, 2009)