1051-60-39          **Hakima Bessaih\*** (`bessaih@uwyo.edu`), Department of Mathematics,Dept. 3036, 1000 East University Avenue, Laramie, WY 82071, and **Franco Flandoli** and **Edriss S Titi**. *Long time behavior for stochastic shell phenomenological models of turbulence.* Preliminary report.

In a recent paper, it has been proposed that the nonlinear deterministic shell model of turbulence and the passive scalar equation have the same scaling exponents of the structure functions. This relationship has been established through a coefficient $\lambda$. In this paper, we deal with the stochastic shell model of turbulence driven by an additive noise. We prove the continuous dependence of the solutions with respect to the parameter $\lambda$. We prove the existence of a finite dimensional random attractor for each value of $\lambda$ and the property of upper semicontinuity of this random attractor. This property is proved by a pathwise argument. We hope that this result or the technique involved may contribute to understand the problem of $T \longrightarrow \infty$. (Received July 31, 2009)

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