

1044-60-17

Hakima Bessaih* (bessaih@uwyo.edu), Department of Mathematics, Laramie, WY 82071, and **Franco Flandoli** and **Edriss S Titi**. *Stochastic Shell models and related topics*. Preliminary report.

We will introduce some shell models that are related to some fluid dynamics like Navier-Stokes equations. Existence and uniqueness of strong solutions for the stochastic version will be proved along with the existence of invariant measures. Asymptotic behavior like random attractor will be investigated. Some open problems related to the structure functions will be discussed. (Received June 24, 2008)