

1104-35-104

**Susan Friedlander\*** ([susan@math.northwestern.edu](mailto:susan@math.northwestern.edu)), Math Dept, USC, Los Angeles, CA 90089, **Nathan Glatt-Holtz** ([negh@vt.edu](mailto:negh@vt.edu)), Math dept, Virginia Tech, Blacksburg, VA 24061, and **Vlad Vicol** ([vvicol@math.princeton.edu](mailto:vvicol@math.princeton.edu)), Math dept, Princeton university, Princeton, NJ 08540. *A Stochastic Shell Model for Turbulence.*

We discuss a shell model first introduced by Desnianskii and Novikov to simulate the cascade process of energy transmission in turbulent flows. We review results that reproduce Onsager's conjecture and Kolmogorov's Laws of turbulence in the case of this shell model with constant forcing. We then discuss recent results for the stochastically driven model. Here localized, Gaussian and white in time forcing serves as a proxy for generic large scale processes driving turbulent cascades. (Received August 25, 2014)