1006-78-39 **Anjan Biswas*** (`abiswas@tnstate.edu`), Department of Physics and Mathematics, 3500 John A. Merritt Blvd, Nashville, TN 37209-1561. *Stochastic perturbation of dispersion-managed optical solitons.*

The soliton perturbation theory is used to study and analyze the stochastic perturbation of optical solitons, with dispersion-management. The super-Gaussian pulses are considered here and the corresponding Langevin equations are derived and analysed. The deterministic perturbation terms that are considered, in addition to stochstic perturbation, are attenuation and bandpass filtering. (Received January 20, 2005)