1024-78-116 Anjan Biswas\* (biswas.anjan@gmail.com), Dept of Appl Math & Theoretical Physics, Cntr for Research & Educ in Opt Sci & Appl, 1200 N Dupont Hwy, Dover, DE 19901-2277. Stochastic perturbation of parabolic law optical solitons.

The stochastic perturbation of optical solitons, due to parabolic law nonlinearity, is studied by the aid of soliton perturbation theory. The corresponding Langevin equation is derived and it is proved that the soliton propagates with a fixed mean velocity. (Received January 04, 2007)