1014-78-1772   **Anjan Biswas*** (`biswas.anjan@gmail.com`), Dept of Applied Math and Theoretical Physics, Delaware State University, Dover, DE 19901-2277. *Stochastic perturbation of power law optical solitons.*

The soliton perturbation theory is used to study and analyze the stochastic perturbation of optical solitons, due to power law nonlinearity, in addition to deterministic perturbations of optical solitons that is governed by the nonlinear Schrödinger's equation. The deterministic perturbations that are considered here are of both Hamiltonian as well as of non-Hamiltonian type. (Received October 03, 2005)