1046-78-300   **Patrice Green*** (`pgreen@desu.edu`), Dept of Applied Math and Theoretical Physics, 1200 N Dupont Hwy, Dover, DE 19901, **Dawn Lott** (`dlott@desu.edu`), Department of Mathematics, 1200 N Dupont Hwy, Dover, DE 19901, and **Anjan Biswas** (`biswas.anjan@gmail.com`), Dept of Applied Math & Theoretical Physics, 1200 N Dupont Hwy, Dover, DE 19901. *Dynamics of super-Gaussian Optical Solitons by Collective Variables Method.*

This work studies the classical optical solitons in presence of perturbation terms that arises in various contexts of the propagation of solitons through optical fibers. The adiabatic parameter dynamics of these solitons are laid down by the aid of collective variables method. super-Gaussian solitons are considered. Finally, the numerical simulations are obtained to complete the study. (Received August 25, 2008)