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**Michael I Weinstein\*** ([miw2103@columbia.edu](mailto:miw2103@columbia.edu)), Dept. Applied Physics and Applied Mathematics, Columbia University, New York, NY 10027. *Dynamics of solitons of the nonlinear Schroedinger / Gross Pitaevskii equation.*

We discuss the dynamics of soliton-like solutions of the nonlinear Schroedinger - Gross Pitaevskii equation. In particular, we present recent results (with Z. Gang) on large time energy distribution in multimoded systems and results (with B. Ilan and Y. Sivan) on solitons with frequencies near a spectral band edge associated with background periodic potential. (Received March 03, 2009)