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**M. Burak Erdogan\*** (berdogan@math.uiuc.edu). *Exponential decay of dispersion managed solitons.*

We study the decay and smoothness of the solutions of the dispersion managed nonlinear Schrodinger equation in the case of vanishing average dispersion. We prove that the soliton-like solutions and their Fourier transforms decay exponentially at infinity. The proof uses exponentially weighted multilinear estimates. This is a joint work with D. Hundertmark and Y.-R. Lee. (Received February 27, 2009)