

Meeting: 1003, Atlanta, Georgia, SS 38A, AMS-SIAM Special Session on Orthogonal Polynomials—Random Matrices—Integrable Systems: Interdisciplinary Aspects, I

1003-35-1514 **Alexander Tovbis*** (atovbis@pegasus.cc.ucf.edu), Orlando, FL 32816. *Semiclassical (zero dispersion limit) of the focusing NLS equation.*

We study the semiclassical limit for a focusing NLS with a certain family of initial data that contains both soliton and pure radiational cases. Several types of leading order asymptotic behavior (in the x, t plane) corresponding to different genres of the associated Riemann-Hilbert Problem are considered. Long time behavior of solutions is also discussed. (Received October 05, 2004)