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**Robert Jenkins\*** (rjenkins@math.arizona.edu), **Jiaqi Liu**, **Peter Perry** and **Catherine Sulem**. *Large time asymptotic behavior for the Derivative Nonlinear Schrödinger Equation.*

I will describe joint work with Jiaqi Liu, Peter Perry, and Catherine Sulem on the derivative nonlinear Schrödinger (DNLS) equation. Using the inverse scattering formulation of DNLS and the  $\bar{\partial}$  generalization of the nonlinear steepest descent method we will show that for initial data in a certain open dense subset of  $H^{2,2}(\mathbb{R})$  that the initial data resolves into a train of bright solitons plus a radiative term. This is part of larger work on the global well-posedness of the DNLS equation. (Received January 17, 2017)