1077-35-489 **Michael E. Taylor*** (met@math.unc.edu), Mathematics Department, University of North Carolina, Chapel Hill, NC 27599. *Gibbs phenomena and Pinsky phenomena for solutions to nonlinear Schrodinger equations.*

We discuss solutions to nonlinear Schrodinger equations on Euclidean space, given piecewise smooth initial data with jumps. We describe results on the nature of the convergence as t tends to zero. Results include analogues of the Gibbs phenomenon over the locus where the jumps occur, and also special effects related to the Pinsky phenomenon (arising in multidimensional Fourier inversion), which relate to focusing effects. (Received September 04, 2011)