1016-35-50 **Jerry L Bona** and **Zoran Grujic*** (zg7c@virginia.edu), Department of Mathematics, Kerchof Hall, University of Virginia, Charlottesville, VA 22904, and **Henrik Kalisch**. *Temporal asymptotics of the domain of spatial analyticity for the derivative Schrödinger equation.*

Lower bounds on the rate of decrease in time of a uniform radius of spatial analyticity for the solutions of the derivative Schrödinger equation

$$iu_t + u_{xx} = i(|u|^2 u)_x$$

will be presented. The bounds depend algebraically on time and are global as long as the L^2-norm of the initial datum is of order 1 (which is consistent with the derivation of the model) and the initial datum satisfies suitable spatial decay requirements on the real axis. (Received January 20, 2006)