1016-46-198 Leonard Gross* (gross@math.cornell.edu), Department of Mathematics, Cornell University, Ithaca, NY 14853. A real analytic infinite dimensional manifold for a problem in critical nonlinearity. Preliminary report.

An ambient space for the solutions to a particular nonlinear PDE with critical nonlinearity is shown to be a real analytic manifold. (Received February 12, 2006)