

Seminar in Nonlinear Systems

Professor Sandro Graffi

Department of Mathematics

Università di Bologna

Mean-Field Approximation of Quantum Systems and Classical Limit

Wednesday, April 17, 2002

3:30 pm

Kidde 228

Abstract: For a class of two body potentials of Kac type we prove that the convergence of the quantum mean field approximation to the Hartree equation is stable at the classical limit $\hbar \rightarrow 0$, where the mean field approximation converges to the Vlasov equation.