The Gross-Pitaevskii (GP) hierarchy arises in the derivation of the nonlinear Schroedinger (NLS) equation from the manybody quantum dynamics of a boson gas. Proving the uniqueness of solutions to the GP hierarchy represents the most involved part in this analysis, and was achieved in a series of seminal papers of Erdoes-Schlein-Yau a few years ago. Recently, in joint work with Hainzl, Pavlovic, and Seiringer we obtained a new, simpler proof of the unconditional uniqueness of solutions to the cubic GP hierarchy in $\mathbb{R}^3$. One of the main tools in our analysis is the quantum de Finetti theorem. This method also allowed us to prove scattering in the defocusing case. (Received January 11, 2014)