

Zied Ammari

Title: On the relationship between non-linear Schrödinger dynamics, Gross-Pitaevskii hierarchy and Liouville's equation.

Abstract: I will explain how the mean-field limit of some quantum field theories yield in a natural way a Liouville equation with a unique probability measures valued solution which turn to be related to nonlinear Schrödinger dynamics and the Gross-Pitaevskii hierarchy. I will review some results in the subject and prove new ones.