Construction of Gibbs measure and almost sure global well-posedness for one dimensional periodic fractional Schrödinger equation.

In this talk we will give the intuition for and the explicit construction of a Gibbs measure for 1D periodic fractional Schrödinger equation. We will also give the proof of almost sure global wellposedness, which closes the gap between deterministic local and global wellposedness range in an almost sure sense. (Received January 02, 2015)