Philippe Sosoe* (psosoe@math.princeton.edu), Fine Hall, Washington Road, Princeton, NJ 08540, and Tadahiro Oh and Jeremy Quastel. On infinite volume Gibbs measures for the defocusing NLS.

In this talk, I will revisit work by Bourgain on global solutions to the defocusing nonlinear Schroedinger equation in one dimension, with initial data chosen according to a Gibbs-type measure on paths on the entire real line. I will explain an alternative, simplified approach to Bourgain's result, which uses a more precise description of the probability measure on the initial data. This will allow us to extend the uniqueness part of his results to higher power nonlinearities than cubic. Joint work with Tadahiro Oh and Jeeremy Quastel. (Received February 06, 2014)