REPLICA ANALYSIS OF THE 1D KPZ EQUATION

TOMOHIRO SASAMOTO

For the last two years, there has been renewed interests in the 1D KPZ equation. One reason is that an explicit formula was given for the one-point height distribution. This is for the narrow wedge initial condition and is based on the results by Tracy and Widom for the ASEP.

In this talk, we discuss a replica approach to the 1D KPZ equation, which seems most useful for various generalizations.