

Stanford Department of Mathematics Colloquium

THE ASYMMETRIC SIMPLE EXCLUSION PROCESS: INTEGRABLE STRUCTURE

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Abstract

The asymmetric simple exclusion process (ASEP) is an interacting particle system that has been much studied both in the mathematics and physics literature. In this lecture we show how using some ideas coming from integrable systems (Bethe Ansatz) various distribution functions for the infinite system can be expressed in terms of certain Fredholm determinants.

Thursday, April 17

4:15 p.m.

Room 380-F

<http://math.stanford.edu/coll/0708/>