

Analysis Seminar

Longest Increasing Subsequences in Permutations

By Gökhan Yıldırım

Abstract: In this survey talk, I will review some interesting results related to the longest increasing subsequence problem such as Erdös-Szekeres Lemma, patience-sorting algorithm, Young tableaux and Schensted correspondence. We will also see how the problem can be reformulated as an interacting particle process. Another reformulation of the problem in permutation-patterns context will be discussed along with some open problems.

The talk will be based on the following survey paper: Longest increasing subsequences: from patience sorting to the Baik-Deift-Johansson theorem. *Bull. Amer. Math. Soc. (N.S.)* 36 (1999), no. 4 by Aldous and Diaconis.

Date: Tuesday, November 20, 2018

Time: 16:00-17:00

Place: Mathematics Seminar Room, SA – 141

Tea and cookies will be served before the seminar.