

ALGEBRA SEMINAR

Unimodality of Fences and Oriented posets.

Ву

Ezgi Kantarcı Oğuz (Galatasaray)

Abstract: Fence posets are combinatorial objects that come up in a variety of settings, recently in the work of Morier-Genoud and Ovsienko regarding q-defomed rationals. We prove their conjecture that says that rank polynomials of fence posets are unimodal by introducing a related class of circular fence posets. We further show a piece-by-piece combinatorial method of building fence posets (and others) and calculating their rank polynomials easily via 2x2 matrices. We discuss recent results and further work. (partially based on joint works with Emine Yıldırım, Mohan Ravichandran and Yalım Özel).

Date: Monday, March 20, 2023 <u>Time:</u> 15:30 – 16:30 (UTC+3) <u>Place:</u> ZOOM. This is an online seminar. To request the event link, please send a message to <u>d.yilmaz@bilkent.edu.tr</u>