

## **ALGEBRA SEMINAR**

## Powers of edge ideals and matchings in graphs

By

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(Gebze)

Abstract: Let G be a finite simple graph. The edge ideal of G, denoted by I (G), is generated by the quadratic monomials corresponding to the edges of G. Computation of Castelnuovo-Mumford regularity of powers of I(G) is a challenging problem. I will explain how this problem connects to matchings in graphs. I will also talk about recent work on squarefree powers of edge ideals.

Date: 5 November 2020

**Time:** 15:00

Place: ZOOM. To request the event link, please send a message

to sezer@fen.bilkent.edu.tr