

## **Analysis Seminar**

## Lower Bounds for Extremal Polynomials

By

## Gökalp Alpan

(Sabancı University)

**Abstract:** In this talk, I will discuss weighted Chebyshev polynomials and orthogonal polynomials, with a special emphasis on the real line.

The weighted Chebyshev polynomials are the monic polynomials that minimize the weighted sup-norm on a given set and monic orthogonal polynomials minimize the L2 norm associated with a Borel measure.

I will survey results involving the lower bounds of the norms of the extremal polynomials mentioned above. I will also discuss some recent results on asymptotics for the lower bounds, which generalize some classical results.

Date: Tuesday, November 5, 2024 Time: 14:00-15:00 Place: SA141 - Mathematics Seminar Room