## Boğaziçi MATH COLLOQUIUM

## The Laguerre-Pólya Class

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## Abstract:

The ancient problem of (precise and approximate) zero localization of polynomials, entire and meromorphic functions has attracted such mathematical giants as Newton, Descartes, Euler, Abel, Gauss, Hermite, Laguerre, Jacobi, Hurwitz, Pólya, Szegő, Schoenberg, Krein and others. Their investigations uncovered tantalizing connections between matrices, groups, continued fractions and zeros of functions. The so-called Laguerre-Pólya class of entire functions emerged as a crossroads of multiple mathematical subfields. I will discuss the remarkable history of the Laguerre-Pólya class and its significance in algebra, number theory, analysis, and combinatorics.

Date : Monday, November 25, 2024 Time: 15:00 Place: TB 130, Boğaziçi University