

# Boğaziçi Math Seminar

## A journey into the world of p-adic heights

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**Abstract:**

In Diophantine geometry, height functions measure the "size" of rational points on algebraic varieties. Such functions play a central role in defining and computing several interesting invariants in arithmetic geometry.

A p-adic height function can be regarded as a "local" analogue of a classical height function, where  $p$  is a prime number, and there are several p-adic height functions in the literature. In this talk, we will journey into the world of p-adic heights. In particular, we will discuss the relationships among different p-adic heights and algorithms to compute them numerically.

**Date :** Wednesday, December 20, 2023

**Time:** 13:30

**Place:** TB 130, Boğaziçi University