

## Mark Kisin: **Integral models of Shimura varieties**

Shimura varieties may be viewed as moduli spaces, for certain Hodge structures, with example being given by families of abelian varieties equipped with a collection of Hodge cycles. Despite their apparently transcendental definition, these varieties have a rich arithmetic theory.

I will discuss the construction of good integral models for these varieties, which involves  $p$ -adic Hodge theory. Their mod  $p$  points admit an explicit description, which is in some sense analogous to the description of their complex points, via the complex uniformization.