

**Title:** *Introduction to Local Models for Shimura Varieties*

**Instructor:** Brian Smithling

**Description:** Local models are schemes that etale-locally model the structure of integral models of certain Shimura varieties. The local models are defined in terms of purely linear-algebraic moduli problems, and are therefore (at least in principle) more approachable than the integral Shimura models themselves, which are defined in terms of abelian varieties. In this mini-course I will give an introduction to local models, focusing on the most basic examples, what's known about local models in general, how they relate to Shimura varieties, and, time permitting, some applications.