Georgios Pappas* (pappasg@msu.edu), Department of Mathematics, Wells Hall, East Lansing, MI 48824. Canonical integral models of Shimura varieties. Preliminary report.

We show how to uniquely characterize integral models of Shimura varieties over some primes where non-smooth reduction is allowed. More specifically, we consider integral models over primes at which the group is tamely ramified and the level subgroup is parahoric. Then we provide a notion of a "canonical" integral model and show that most of the integral models that have been constructed so far are, indeed, canonical. (Received July 02, 2019)