

## **Basic Loci in Shimura Varieties of Coxeter Type**

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### **Abstract**

In this talk, we discuss the general problem of giving an explicit description of the basic locus in the reduction modulo  $p$  of Shimura varieties. Motivated by the work of Vollaard-Wedhorn, Rapoport-Terstiege-Wilson, we classify the cases where the basic locus is (in a natural way) the union of classical Deligne-Lusztig sets associated to Coxeter elements. We show that if this is satisfied, then the Newton strata and Ekedahl-Oort strata have many nice properties. This is based on a joint work with U. Goertz.