1125-11-349   **Ana Caraiani*** (`caraiani@math.uni-bonn.de`), Venusbergweg 36, 53115 Bonn, Germany, and **Peter Scholze**. *On torsion in the cohomology of unitary Shimura varieties.*

I will discuss joint work with Peter Scholze on torsion in the cohomology of certain unitary Shimura varieties. The range of degrees that torsion can occur in is restricted by a genericity condition on the corresponding Galois representation. I will discuss how to prove this kind of result using perfectoid Shimura varieties and the geometry of the Hodge-Tate period morphism. (Received August 29, 2016)