



## Seminar/Talk

# Some remarks on the component group of the Sato-Tate group

**Victoria Cantoral Farfán**  
Georg-August-Universität Göttingen

Host: Tim Browning

The famous Sato-Tate conjecture for elliptic curves (without complex multiplication and defined over a number field) predicts the equidistribution of traces of Frobenius automorphisms with respect to the Haar measure of the corresponding Sato-Tate group. This conjecture has already been generalized for higher-dimensional abelian varieties, K3 surfaces, and pure motives of odd weight. It seems natural to study in detail the Sato-Tate group in order to tackle the generalized Sato-Tate conjecture. During the first part of this talk, we are going to discuss this conjecture. The second part will be devoted to the study of the component group of the Sato-Tate group of an abelian variety of arbitrary dimensions, defined over a number field  $K$ . This is joint work with Grzegorz Banaszak.

**Thursday, May 19, 2022 01:00pm - 03:00pm**  
Heinzel Seminar Room (I21.EG.101), Office Building West



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: <https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.