

WYKŁAD ONLINE

w ramach seminarium

ARYTMETYCZNA GEOMETRIA ALGEBRAICZNA

(organizatorzy: Grzegorz Banaszak, Piotr Krasoń)

Środa **21 grudnia**, godz. **18:00**

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

Abstract: The famous Sato-Tate conjecture for elliptic curves defined over a number field (without complex multiplication) predicts the equidistribution of Frobenius traces with respect to the Haar measure of the corresponding Sato-Tate group under the trace map. This conjecture has already been generalized for higher-dimensional abelian varieties, $K3$ surfaces, and pure motives of odd weight. It seems then natural to study in detail the Sato-Tate group to tackle the generalized Sato-Tate conjecture. During this talk, we are going to introduce the abovementioned conjecture, and subsequently, we will discuss the component group of the Sato-Tate group associated with abelian varieties defined over a number field of arbitrary dimension. This is joint work with Grzegorz Banaszak.