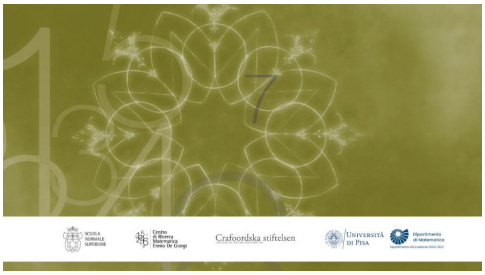

Contribution ID: **4** Type: **not specified**

Automorphisms of Jacobians and Simplicity

Thursday, 2 October 2025 10:00 (1 hour)

The study of abelian varieties with non-trivial endomorphism algebras is a classical topic in algebraic geometry. A fundamental result by Shimura classifies all families of principally polarized abelian varieties whose endomorphism algebras properly contain \mathbb{Z}. However, a complete analogous classification for Jacobians remains open. In this talk, we investigate certain families of Jacobians arising from unramified cyclic coverings of hyperelliptic curves. By using a deformation argument, we provide a full description of their (non-trivial) endomorphism algebras and prove that the generic Jacobian in these families is simple.

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