



ODTU-Bilkent Algebraic Geometry

Computing transcendence and linear relations of 1- periods

By

Emre Can Sertöz
(Leiden)

Abstract: I will sketch a modestly practical algorithm to compute all linear relations with algebraic coefficients between any given finite set of 1-periods. As a special case, we can algorithmically decide transcendence of 1-periods. This is based on the "qualitative description" of these relations by Huber and Wüstholz. We combine their result with the recent work on computing the endomorphism ring of abelian varieties. This is a work in progress with Jöel Ouaknine (MPI SWS) and James Worrell (Oxford).

Date: 11 October 2024, Friday

Time: 15:40 (GMT+3)

Place: Zoom

To request the event link, please send a message to sertoz@bilkent.edu.tr