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# ALGEBRAIC COMPUTATIONS OF THETA CONSTANTS

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## Abstract

David Mumford showed that a principally polarized abelian variety can be written as an intersection of quadrics in a projective space. The coefficients of these quadrics are determined by certain constants, called theta constants, which are the values of transcendental functions, called theta functions. In this talk, we will see algebraic computations of theta constants associated with a non-hyperelliptic curve. By that way, we will also discuss some extrinsic geometric features of non hyperelliptic curves from a computational perspective.

**Date :** Tuesday, November 19, 2019

**Time:** 15:00

**Place:** IMBM Seminar Room, Boğaziçi University South Campus