

Abstract:

In the first part of this talk, I will describe the arithmetic theta series constructed from the classes of curves on the arithmetic surface associated to a Shimura curve over the rationals. The height pairing of two such series coincides with a certain restriction of a genus 2 generating series for 0-cycles on such a surface. In the second part of the talk, I will give a few more details about the calculations involved and mention the connection with a formula for the central derivatives of the L-functions of modular forms of weight 2. This work is part of a joint project with Michael Rapoport (Bonn) and Tonghai Yang (Wisconsin).