Derivatives of Eisenstein series and Faltings heights

Michael Rapoport (`rapoport@math.uni-koeln.de`)
Universität zu Köln
Mathematisches Institut
Weyertal 86-90
50931 Köln
Germany

Abstract. I will describe my recent work with S. Kudla and T. Yang which identifies the Fourier expansion of a special value of the derivative of certain Eisenstein series for SL(2) with a generating series involving the Faltings heights of abelian varieties of CM type.