

Relative Langlands Program

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Gross–Zagier Formula in High Dimensions

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In their 1986 paper, Gross and Zagier proved a formula relating the height of Heegner point on an elliptic curve to the first derivatives of the L-function of that elliptic curve. Since then, the problem of generalizing this fundamental result to higher dimensional algebraic varieties has been of great interest. In this talk we will present some of the generalizations with relatively recent results, with an emphasis on Kudla's program and the arithmetic Gan-Gross-Prasad conjecture.
