

p -adic heights of Heegner points and Beilinson–Flach elements.

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About 10 years ago, Ben Howard proved a Lambda-adic Gross–Zagier formula relating the p -adic heights of Heegner points over ring class fields of p -power conductor to the derivative of a two-variable p -adic L -function. In this talk, we will explain a strategy for extending Howard’s theorem to higher weights. Rather than on calculations inspired by the original work of Gross and Zagier, our approach is via Iwasawa theory, based on the connection between Heegner points and Beilinson–Flach elements, and their variation in p -adic families.

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