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Residually isomorphic modular forms and BDP p -adic L -functions

Let $p > 2$ be a prime that is split in an imaginary quadratic field K and let $f \in S_{2r}(\Gamma_0(N))$ be a newform whose conductor N satisfies the strong Heegner hypothesis with respect to K . In this setting, one may construct the Bertolini-Darmon-Prasanna (BDP) p -adic L -function $L_{BDP}(f)$. In this talk, we show a congruence between $L_{BDP}(f_1)$ and $L_{BDP}(f_2)$ when f_1 and f_2 are residually isomorphic modulo some prime power. We will also discuss some implications for the logarithms of Heegner cycles and the anticyclotomic Iwasawa main conjecture.