## 1086-11-1174Jennifer S. Balakrishnan\* (jen@math.harvard.edu), Mirela Çiperiani and William A.<br/>Stein. p-adic heights of Heegner points and Heegner L-functions.

Let E be an elliptic curve defined over the rationals. In 2006, Mazur, Stein, and Tate gave an algorithm to compute p-adic heights on E. We describe a few algorithms to compute p-adic heights of points of E defined over number fields. Applying these methods to Heegner points of non-fundamental discriminant, we discuss the computation of the first explicit examples of Heegner L-functions and anticyclotomic  $\Lambda$ -adic regulators. (Received September 19, 2012)