1117-11-70   **Kestutis Cesnavicius*** (`kestutis@berkeley.edu`), Department of Mathematics, University of California Berkeley, 987 Evans Hall, Berkeley, CA 94703, and **Naoki Imai**. *The remaining cases of the Kramer–Tunnell conjecture.*

For an elliptic curve E over a local field K and a separable quadratic extension of K, motivated by connections to the Birch and Swinnerton-Dyer conjecture, Kramer and Tunnell have conjectured a formula for computing the local root number of the base change of E to the quadratic extension in terms of a certain norm index. The formula is known in all cases except some when K is of characteristic 2, and we complete its proof by reducing the positive characteristic case to characteristic 0. For this reduction, we exploit the principle that local fields of characteristic p can be approximated by finite extensions of $\mathbb{Q}_p$—we find an elliptic curve E' defined over a p-adic field such that all the terms in the Kramer–Tunnell formula for E' are equal to those for E. (Received December 31, 2015)