ERRATA TO "EXTREMAL PRIMES FOR ELLIPTIC CURVES WITH COMPLEX MULTIPLICATION"

Maknys's argument for the equidistribution result quoted as Proposition 2 is incomplete. In its place, one can substitute the following estimate, which is within the reach of current technology.

Proposition 2′. Let K be an imaginary quadratic field. Fix $\mu, \nu \in \mathcal{O}_K$ with $\mu \neq 0$ and with $\nu \bmod \mu$ an invertible residue class. As $x \to \infty$,

$$\sum_{\substack{\varpi \text{ prime} \\ N\varpi \text{ prime} \\ x < N\varpi \leq x + x/\log x \\ \varpi \equiv \nu \pmod{\mu} \\ \theta_1 < \arg \varpi < \theta_2}} 1 \sim \frac{w_K}{h_K \varphi(\mu)} \cdot \frac{\theta_2 - \theta_1}{2\pi} \cdot \frac{x/\log x}{\log x},$$

when $2\pi \geq \theta_2 - \theta_1 > x^{-0.251}$. Here the estimate is uniform in the θ_i.

Our proof requires only minor modifications (one should now define $\mathcal{X}(\varpi) = \{X \in \mathbb{R} : X < N\varpi \leq X + X/\log X\}$). We thank Joshua Stucky for bringing this issue to our attention and for helpful correspondence.