Abstract. Let $p_n/q_n = (p_n/q_n)(x)$ denote the $n^{th}$ simple continued fraction convergent to an arbitrary irrational number $x \in (0, 1)$. Define the sequence of approximation constants $	heta_n(x) := q_n^2|x - p_n/q_n|$. It was conjectured by Lenstra that for almost all $x \in (0, 1)$,

$$\lim_{n \to \infty} \frac{1}{n} |\{j : 1 \leq j \leq n \text{ and } \theta_j(x) \leq z\}| = F(z)$$

where $F(z) := z/\log 2$ if $0 \leq z \leq 1/2$, and $\frac{1}{\log 2}(1 - z + \log(2z))$ if $1/2 \leq z \leq 1$. This was proved in [BJW83] and extended in [Nai98] to the same conclusion for $\theta_{k_j}(x)$ where $k_j$ is a sequence of positive integers satisfying a certain technical condition related to ergodic theory. Our main result is that this condition can be dispensed with; we only need that $k_j$ be strictly increasing.
