1125-30-2326 **Lisa Lorentzen*** (`lisa@math.ntnu.no`), Department of Mathematical Sciences, NTNU, T, Norway. *Classical Convergence of Random Continued Fractions.*

Convergence theorems for continued fractions $\mathbf{K}(a_n/b_n)$ with real or complex elements (a_n, b_n) where all $a_n \neq 0$, offer sufficient conditions on $\{(a_n, b_n)\}_{n=1}^{\infty}$ for $\mathbf{K}(a_n/b_n)$ to converge; that is, for $\lim_{n\to\infty} f_n$ to exist in $\widehat{\mathbb{C}} := \mathbb{C} \cup \{\infty\}$, where f_n is the truncated continued fraction of length n. However, these conditions are by no means necessary. In the present talk we prove that if (a_n, b_n) is picked randomly and independently from $\mathbb{C}^2 = \mathbb{C} \times \mathbb{C}$ (or from $\mathbb{R}^2$) according to some probability measure on $\mathbb{C}^2$, then the resulting continued fraction $\mathbf{K}(a_n/b_n)$ converges with probability 1 as long as the measure μ has sufficient support and the expectation of

$$\log\left(|a| + \frac{1 + |b|^2}{|a|}\right)$$

is finite. This extends earlier results in this direction. (Received September 20, 2016)