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On the counting function of the range of the Carmichael λ-function

Florian Luca*

fluca@matmor.unam.mx

The Carmichael λ-function associates to n the exponent $\lambda(n)$ of the multiplicative group modulo n. In my talk, I will describe the main ideas behind the proof that the counting function $\#\{\lambda(n) \le x\}$ of the range of the Carmichael function $\lambda(n)$ below x is $x/(\log x)^{\eta+o(1)}$ as $x \to \infty$, where $\eta = 1 - (1 + \log\log 2)/\log 2 = 0.08607\ldots$ is the Erdös–Tenebaum–Ford constant. The proof uses sieve methods.

This is joint work with Kevin Ford and Carl Pomerance.

*School of Mathematics, University of the Witwatersrand, Wits 2050, SOUTH AFRICA.