BOSTON UNIVERSITY NUMBER THEORY SEMINAR

Stirling's formula in number fields

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Monday, Sep 15 at 4:15 pm 111 Cummington Street, MCS B21 Tea and cookies in MCS 153¹ at 4:00 pm

Abstract: Stirling's formula says $n! \sim (n^n/e^n)\sqrt{2\pi n}$, or equivalently $\log(n!) = n \log n - n + \frac{1}{2} \log(2\pi n) + o(1)$, as $n \to \infty$. I will discuss what an analogue of this formula looks like in a number field K, where there is an unexpected contribution of zeros of the zeta-function of K when $K \neq \mathbb{Q}$.

¹Different than most weeks!