Leibniz Universität Hannover

Oberseminar
Zahlentheorie und Arithmetische Geometrie

Dr. James Parks

(University of Lethbridge, Kanada)

"Low-lying zeros of quadratic Dirichlet L-functions"

In this talk we study the 1-level density of low-lying zeros of Dirichlet L-functions attached to real primitive characters. We obtain an asymptotic expansion of this quantity with lower order terms in descending powers of $\log X$. We show that this is valid under GRH when the support of the Fourier Transform of the implied even test function ϕ is contained in $(-2, 2)$. We also uncover a phase transition when the supremum of the support of $\widehat{\phi}$ reaches 1, where a new lower order term appears. This is joint work with Daniel Fiorilli and Anders Södergren.

Mittwoch 14.10.2015

11:00 Uhr, Raum g117

Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

Institut für Algebra, Zahlentheorie und Diskrete Mathematik