Bernoullis Tafelrunde

Graduate Student Seminar

Thursday, 12 March, 12:15-13:00
Seminarraum 05.002, Spiegelgasse 5

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The Dirichlet divisor problem and beyond

Abstract

The divisor function, i.e. the function which counts the number of divisors of a positive integer n, is one of the simplest arithmetic functions in number theory. Yet it plays an important role in many number theoretical problems, not least due to its close relationship to the famous Riemann zeta function. In this talk we give an introduction to the basic questions concerning the divisor function – in particular the so-called Dirichlet divisor problem – and its connection to some well-known (and mainly unsolved) problems in analytic number theory.