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Moments of Dirichlet L -functions in Function Fields

Abstract

The study of moments of Dirichlet L -functions is an important topic to study in Analytic Number Theory due to its applications to the Lindelöf hypothesis and non-vanishing results. In this talk, we will introduce the theory of the Riemann-zeta function and Dirichlet L -functions, as well as the Riemann hypothesis and Lindelöf hypothesis. Furthermore, we will discuss some results about moments of the Riemann-zeta function and Dirichlet L -functions, as well as its relationship with the Lindelöf hypothesis. Finally, we will discuss some more recent work about moments of Dirichlet L -functions in function fields.