Haar Measure on the Additive Group of Adeles

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Abstract

Let G be an additive topological group which is locally compact. There exists an inner regular, countably additive, translation-invariant measure on G, which is called a Haar measure.

Let K be a finite extension of $\mathbb{Q}$ and let V_K^+ denote the additive group of adeles of K. Since V_K^+ is a locally compact topological group, there is a Haar measure μ on V_K^+. In this talk we discuss some properties of μ as well as some properties of the induced Haar measure on the quotient space V_K^+/K^+.