
Explicit upper bounds for residues of Dedekind zeta functions

Stéphane Louboutin

Explicit bounds on the residues at $s = 1$ of the Dedekind zeta-functions of number fields (in terms of their degree and of the logarithm of the absolute value of their discriminant) have long been known. They date back to C. L. Siegel and E. Landau. The author gave a neat explicit bound in 2000, the best known bound until recently. In 2012 X. Li improved upon this bound. His results, although effective, were not explicit. Wee make one of his two bounds explicit and determine when it is the best known one.