

Year: 2011

Vol.: 78

Fasc.: 3-4

**Title:** Mean values of  $L$ -functions and relative class numbers of cyclotomic fields

**Author(s):** Stéphane R. Louboutin

Using formulas for quadratic mean values of  $L$ -functions at  $s = 1$ , we recover previously known explicit upper bounds on relative class numbers of cyclotomic fields. We also obtain new better bounds.

**Address:**

Stéphane R. Louboutin  
Institut de Mathématiques de Luminy  
UMR 6206 163  
avenue de Luminy, Case 907  
13288 Marseille Cedex 9  
France