

Special values of Dedekind zeta-functions and motivic cohomology

For a totally real number field F and an even integer $n \geq 2$ the value $\zeta_F(1-n)$ of the Dedekind zeta-function $\zeta_F(s)$ at $s = 1-n$ is a non-zero rational number. We discuss the relation between the numerator and denominator of this number and orders of motivic cohomology groups. This interpretation is based on the Main Conjecture in Iwasawa theory proved by Wiles and Voevodsky's proof of the Bloch-Kato Conjecture.