

LINEAR FORMS ON SINNOTT'S MODULE

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By an abelian number field K we mean a finite Galois extension of \mathbb{Q} having an abelian Galois group $G = \text{Gal}(K/\mathbb{Q})$. Sinnott's module U of K , which is a finitely generated $\mathbb{Z}[G]$ -submodule of the group ring $\mathbb{Q}[G]$, appears to be useful in the description of algebraic properties of the group of circular units of K and – if K is imaginary – of the Stickelberger ideal of K .

The aim of this talk is to describe a result on linear forms on Sinnott's module and to show some applications of this result.

**This is joint work with Cornelius Greither (Universität der
Bundeswehr, Munich, Germany)**