1048-11-117   **Paul J. Truman*** (`pt224@exeter.ac.uk`), SECAM, Harrison Building, North Park Road, Exeter, Devon EX4 4QF, England. *Hopf-Galois Module Structure Of Some Tamely Ramified Extensions.* Preliminary report.

The use of nonclassical Hopf-Galois structures in the study of the integral Galois module structure of wildly ramified extensions has proven fruitful. For example, Byott has exhibited finite wildly ramified Galois extensions L/K of p-adic fields for which the ring of algebraic integers $\mathfrak{O}_L$ is not a free module over the associated order in the group algebra $K[G]$, but is a free module over the associated order in some nonclassical Hopf-Galois structure admitted by the extension. On the other hand, if L/K is a tamely ramified extension of local or global fields then little is known about the structure of $\mathfrak{O}_L$ over the associated order in any of the nonclassical structures admitted by the extension. We study this problem for certain classes of tamely ramified extensions. (Received February 02, 2009)