1048-11-195   **Griff Elder*** (`elder@unomaha.edu`), Dept of Math, University of Nebraska at Omaha, Omaha, NE 68182-0243. *Galois scaffolding for Galois module structure.*

A Galois scaffold, in an extension of local fields, is a generalization of a normal basis that behaves well with respect to valuation and is thus useful for addressing questions in Galois module structure. We will describe a Galois scaffold for arbitrarily large elementary abelian p-extensions in characteristic p and present a result (joint with Nigel Byott) where this Galois scaffold is used to determine necessary and sufficient conditions for the ring of integers to be free over the associated order. (Received February 07, 2009)