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Markus Schmidmeier* (markus@math.fau.edu), Florida Atlantic University. *Poset representations with coefficients in $\mathbb{Z}/(p^n)$ and in $k[T]/T^n$.*

Let P be a finite partially ordered set and Λ a commutative uniserial ring, for example, $\Lambda = \mathbb{Z}/(p^n)$ or $\Lambda = k[T]/T^n$. We are interested in the category of Λ -linear submodule representations of P ; here it appears that the case where $\Lambda = k[T]/T^n$ is easier to handle since methods from the representation theory of finite dimensional algebras, in particular coverings can be used. We discuss results related to a problem posed by M.C.R. Butler in 2004 for the case where P is the one point poset. (Received February 20, 2005)