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Ian M Musson*, Department of Mathematical Sciences, University of Wisconsin-Milwaukee,
Milwaukee, WI. *Faithful Cyclic Modules for Enveloping Algebras and Sklyanin Algebras.*

Let U be the enveloping algebra of a finite dimensional nonabelian Lie algebra \mathfrak{g} over a field of characteristic zero. We show that there is an open nonempty open subset X of \mathfrak{g} such that U/Ux is faithful for all $x \in X$. We prove similar results for homogenized enveloping algebras and for the three dimensional Sklyanin algebras at points of infinite order. It would be interesting to know if there is a common generalization of these results. (Received September 20, 2005)