Jose A. Velez\* (jvelezma@math.uiowa.edu), University of Iowa, Department of Mathematics, 14 MacLean Hall, Iowa City, IA 52242. *Universal deformation rings of modules over self-injective algebras*. Preliminary report.

Let  $\Lambda$  be a finite dimensional self-injective algebra over an algebraically closed field, and let V be a finitely generated  $\Lambda$ -module. We first give a sufficient criterion for V to have a universal deformation ring. We then turn to a particular self-injective algebra  $\Lambda$  and determine the universal deformation rings for some of the  $\Lambda$ -modules V that satisfy this criterion. (Received September 09, 2009)