998-13-171 Greg Piepmeyer (piepmeye@math.utah.edu), Department of Mathematics, University of Utah, 155 S 1400 E, Rm 233, Salt Lake City, UT 84112-0090, and Paul C. Roberts* (roberts@math.utah.edu), Department of Mathematics, University of Utah, 155 S 1400 E, Rm 233, Salt Lake City, UT 84112-0090. Constructing modules of finite projective dimension.

In 1985 Dutta, Hochster, and McLaughlin constructed a module of finite projective dimension with negative intersection multiplicity. Recently Roberts and Srinivas used an exact sequence from K-theory to prove that many such examples exist and, in a certain sense, to explain where they come from. In this talk we outline how to use this method to construct actual examples with specified intersection properties. (Received February 24, 2004)