

Meeting: 999, Nashville, Tennessee, SS 8A, Special Session on Algebraic Geometry and Commutative Algebra

999-14-174 **Scott Nollet*** (s.nollet@tcu.edu), TCU Box 298900, Fort Worth, TX 76129. *Curves on double surfaces.*

When classifying curves in \mathbb{P}^3 of small degree, one must consider curves lying on degenerate surfaces, including double surfaces. I will describe some general results about curves lying on double surfaces and how they move in families. As an application, I will describe some deformations of curves used in showing connectedness of the Hilbert schemes of degree four curves. (Received August 22, 2004)