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998-57-351 **Luis G Valdez-Sanchez*** (valdez@math.utep.edu), Department of Mathematical Sciences, 500 West University Ave., El Paso, TX 79968. *Seifert Klein bottles for knots in the 3-sphere*. Preliminary report.

The knots in the 3-sphere which bound essential Seifert Klein bottles with distinct boundary slopes have been recently classified: with the exception of the $(-2,3,7)$ pretzel knot (the Fintushel-Stern knot), all such knots are certain satellites of 2-cable knots. Here we address the question of the number of distinct essential Seifert Klein bottles with the same boundary slope a knot can bound, up to ambient isotopy. We prove that any hyperbolic knot bounds at most six Seifert Klein bottles with a given boundary slope; on the other hand, the Seifert Klein bottles in a minimal projection of hyperbolic pretzel knots of length 3 are unique and π_1 -injective, with surgery along their boundary slope producing irreducible toroidal manifolds. The cable knots which bound essential Seifert Klein bottles are also classified: their Seifert Klein bottles are non- π_1 -injective, and unique in the case of torus knots. For satellite knots in general, there is no upper bound for the number of distinct Seifert Klein bottles a knot can bound. (Received March 02, 2004)