1108-57-182 Charles Livingston* (livingst@indiana.edu), Mathematics Department, Indiana University, Bloomington, IN 47405, and Cornelia Van Cott. Knot signatures, upsilon, and the four-genus of knots. Preliminary report.

The Levine-Tristram signature function and the recently defined Ozsvath-Stipsicz-Szabo upsilon function yield homomorphisms from the knot concordance group to the space of functions on [0,1]. Both provide bounds on the four-genus of a knot. In this talk I will review the definitions of these functions. Connected sums of torus knots will be used to illustrate their strengths and complementary nature in determining the four-genus of knots. (Received January 15, 2015)