Shida Wang* (wang217@indiana.edu). The gap between algebraic knots and iterated torus knots.

We will review the Ozsvath-Stipsicz-Szabo Upsilon invariant and give an application.

First we will introduce the semigroup of L-space knots. Then we will use the semigroup in the computation of the Upsilon invariant and show that there are infinitely many iterated torus knots linearly independent from connected sums of algebraic knots. (Received August 16, 2016)