

1112-57-375

Shida Wang* (wang217@indiana.edu). *The genus filtration in the concordance group.*

We define a filtration of the smooth concordance group based on the genus of representative knots. We will explore some examples and give an obstruction using the invariants of epsilon equivalence classes defined by J. Hom. As a consequence, we will prove that the quotient groups with respect to this filtration contain an infinitely generated free summand of topologically slice knots. (Received August 09, 2015)