

1142-57-100

Allison N. Miller* (allison.miller@rice.edu), Rice University, Department of Mathematics – MS 136, P.O. Box 1892, Houston, TX 77005. *Satellite operators and knot concordance*.

Abstract: The set of knots modulo (smooth or topological) concordance can be considered with a variety of extra structures, such as the group structure induced by connected sum and the metric induced by the 4-genus function. Since the classical satellite construction behaves nicely with respect to concordance (if K and K' are concordant then $P(K)$ and $P(J)$ are concordant for any pattern P), it is natural to ask about the properties of satellite actions with respect to these extra structures. I will briefly survey known results in this area, and then discuss a recent result which uses winding number to give a complete characterization of when two patterns induce operators which are a bounded distance from each other. (Received August 30, 2018)