

1160-57-288

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Knots in the three-sphere can be represented by braids, which can in turn be thought of as diffeomorphisms of punctured disks. One can ask to what extent properties of such a diffeomorphism dictate topological properties of the corresponding knot. Intuitively, a number called the fractional Dehn twist coefficient measures how much a braid twists about the boundary of the punctured disk. In this talk I will discuss some observations relating the fractional Dehn twist coefficient of a braid to the slice genus of the corresponding knot. This work arose from a research group at the Women in Symplectic and Contact Geometry Workshop held at ICERM in Summer 2019. (Received August 11, 2020)