

1123-57-25

Micah Chrisman* (mchrisma@monmouth.edu). *Virtual Knot Concordance and the Band-Pass Move.*

Two long virtual knots are concordant if one may be obtained from the other by a finite sequence of extended Reidemeister moves, births b , saddles s , and deaths d such that $\#b - \#s + \#d = 0$. A long virtual knot is slice if it is concordant to the long unknot. It is ribbon if it has a concordance with the unknot containing no births. Kauffman showed that every classical knot is band-pass equivalent to the unknot or the trefoil. All classical ribbon knots are band-pass equivalent to the unknot. We show that there are long virtual ribbon knots that are not band-pass equivalent to either the unknot or the trefoil. Further we establish some elementary facts about the long virtual knot concordance group. Some joint work with H. U. Boden and R. I. Gaudreau on slice virtual knots is also discussed. (Received August 03, 2016)