Kaur, K.; Prabhakar, M.; Vesnin, A.
An unknotting index for virtual links. (English) Zbl 1426.57027

Summary: Given a virtual link diagram $D$, we define its unknotting index $U(D)$ to be minimum among $(m,n)$ tuples, where $m$ stands for the number of crossings virtualized and $n$ stands for the number of classical crossing changes, to obtain a trivial link diagram. By using span of a diagram and linking number of a diagram we provide a lower bound for unknotting index of a virtual link. Then using warping degree of a diagram, we obtain an upper bound. Both these bounds are applied to find unknotting index for virtual links obtained from pretzel links by virtualizing some crossings.

MSC:
57K12 Generalized knots (virtual knots, welded knots, quandles, etc.)

Keywords:
virtual link; unknotting index; pretzel link; span value

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References:

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