

THE LINEAR GROWTH IN THE LENGTHS OF A
FAMILY OF THICK KNOTS

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Abstract

For any given knot K , a thick realization K_0 of K is a knot of unit thickness which is of the same knot type as that of K . In this paper, we show that there exists a family of prime knots $\{K_n\}$ with the property that $Cr(K_n) \rightarrow n$ (as $n \rightarrow n$) such that the arc-length of any thick realization of K_n will grow at least linearly with respect to $Cr(K_n)$.

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