

Kalka: Reidemeister distance of knot diagrams and complexity of relations in the braid group

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2:11 PM

Following work by Hass & Nowik.

$$d(\underbrace{D}_{\substack{\text{n-string} \\ \text{diagram}}}, \underbrace{I}_{\substack{\text{0}}}) \leq 2^{C^n} \quad C \sim 10^{11} \quad \text{Hass-Lagarias}$$

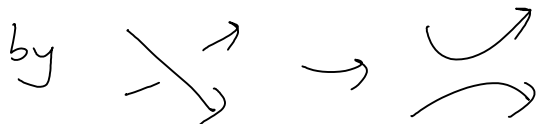
<http://www.math.lsa.umich.edu/~lagarias/>

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$\mathcal{D}$  = set of directed knot diagrams.

$\mathcal{L}$  = set of directed 2-component link diagrams

$$\mathcal{L} \ni \mathcal{D} \longrightarrow \mathcal{D}^a \in \mathcal{D} \quad \text{For } a \in \mathcal{D}_+ \cup \mathcal{D}_-$$



... Continued as in [~people/kalka/ReidemeisterDistance.pdf](#)

... some lower bounds as well, up to quadratic