1099-57-323   **Susan C. Brooks**, **Oguz Durumeric** and **Jonathan K. Simon***
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52242. *Knots connected by wide ribbons.* Preliminary report.

Thin ribbons in $\mathbb{R}^3$ are well understood: the two boundary curves are the same knot type, and there is the important "link=twist+writhe" theorem. What happens if we let the ribbons get wide?

In this talk, we consider how the knot types of the ribbon edges might be related. Think in terms of one "core" curve K and the ribbon being generated by a vector field of length r defined along K. When the width r gets larger than the injectivity radius of K, the knot type of the outer boundary curve can change. Does the knot type eventually stabilize? to what?? How many knot types might occur? (Received February 10, 2014)