963-51-184 John M Sullivan* (jms@uiuc.edu), Dept. of Math., 1409 W Green St, Urbana, IL 61801, and Jason Cantarella (cantarel@math.uga.edu), Rob Kusner (kusner@math.umass.edu) and Greg Kuperberg (greg@math.ucdavis.edu). The Second Hull of a Knotted Curve.

We define the second hull of a space curve, consisting of those points which are doubly enclosed by the curve in a certain sense. We prove that any knotted curve has nonempty second hull. We relate this to recent results on thick knots, quadrisecants, and minimal surfaces. (Received January 22, 2001)