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Stu Whittington* (swhittin@chem.utoronto.ca), University of Toronto, Toronto, Ontario M5S 3H6, Canada. *Counting self-entangled surfaces*. Preliminary report.

Just as simple closed curves can be knotted in 3-space and arcs can have self-entanglement complexity, so surfaces can be self-entangled in various ways. If a surface has a boundary that boundary can be knotted in 3-space. 2-spheres can be knotted in 4-space and 2-manifolds without boundary can show various kinds of entanglement complexity depending on the dimension of the ambient space. Several rigorous results – some old and some new – will be presented. This is joint work with Mashid Atapour, Chris Soteris, De Witt Sumners and Buks van Rensburg. (Received August 24, 2016)