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**Eric J Rawdon\*** (ejrawdon@stthomas.edu). *Knotted open chains*. Preliminary report.

Some proteins are now classified as being knotted. However, proteins have free ends and knotting, traditionally, has only been defined formally for closed curves. Defining knotting in open chains is tricky and ambiguous. We will show one definition of open knotting and search for minimal length knotted arcs within knotted open and closed chains. This is joint work with Ken Millett, Andrzej Stasiak, and Joanna Sulowska. (Received December 13, 2011)