## 1145-05-279

Mark E. Kidwell\* (mark\_peggy@verizon.net), 368 Dewey Drive, Annapolis, MD 21401. T.S.Michael's joint work on intrinsically knotted graphs.

In a 2010 paper, T.S.Michael, Brenda Johnson and the speaker proved that any graph with 20 edges or fewer can be embedded in 3-space so that each cycle in the graph is unknotted. This bound is best possible, since Conway and Gordon had proved in 1983 that the complete graph K(7), with 21 edges, is unknotted. The proof makes heavy use of the delta-wye transformation. (Received August 28, 2018)