1131-57-312   **Samuel J. Lomonaco*** (`lomonaco@umbc.edu`), University of Marylan Baltimore County (UMBC), 1000 Hilltop Circle, Baltimore, MD 21250. *A reduction of 4-D knot theory to 3-D knot theory, and its application to the higher homotopy groups of knots.* Preliminary report.

We begin by showing how four dimensional knots [i.e., (4,2)-knots] can be represented as labelled embeddings of closed 4-valent graphs in 3-space. We then use this representation to compute the higher homotopy groups of four dimensional knots. (Received July 17, 2017)