## 1020-57-57

Yuanan Diao<sup>\*</sup> (ydiao@uncc.edu), Department of Mathematics and Statistics, UNC Charlotte, Charlotte, NC 28223, and Gabor Hetyei and Kenneth E Hinson. *Tutte Polynomials of Signed Graphs and Jones Polynomials of Some Large Knots.* Preliminary report.

It is well-known that the Jones polynomial of a knot is closely related to the Tutte polynomial of a special graph obtained from a regular projection of the knot. In this paper, we study the Tutte polynomials for signed graphs. We show that if a signed graph is constructed from graphs via graph tensor product, then its Tutte polynomial can be expressed in terms of the Tutte polynomial of the original graphs, thus enabling us to compute the Jones polynomials for some (special) large non-alternating knots. (Received August 08, 2006)