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Adam Giambrone* (adam.giambrone@uconn.edu). *σ -Adequate Link Diagrams and the Tutte Polynomial*. Preliminary report.

A well-known bijection between checkerboard-colored link diagrams and edge-signed planar graphs has led to a number of connections between link polynomials and graph polynomials. As an example, Thistlethwaite extracted a “boundary term polynomial” from the unnormalized Kauffman polynomial and expressed this polynomial as a product of Tutte polynomials. From this result, Thistlethwaite proved that a link diagram is A -adequate if and only if its boundary term polynomial is nonvanishing. In this talk, we will discuss an extension of this result to σ -adequate link diagrams. We will also show how a relatively recent expansion of the Tutte polynomial can be used to prove that every link diagram is σ -adequate. (Received September 19, 2015)