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David K. Heywood* (davaudoo@mail.fresnostate.edu) and **Dionne F. Ibarra**. *A state model for the two-variable Kauffman polynomial*. Preliminary report.

The two-variable Kauffman polynomial and the HOMFLY-PT polynomial for links are distinct, with different topological properties. Francois Jaeger showed that there is a beautiful relationship between these link invariants, by presenting the Kauffman polynomial of an unoriented link L as a weighted sum of HOMFLY-PT polynomials of oriented links associated with L . Murakami, Ohtsuki and Yamada (MOY) constructed a state model for the HOMFLY-PT polynomial via planar graphs (flattenings of oriented link diagrams) and a recursive evaluation of these graphs.

We apply the MOY framework to Jaeger's work, and construct a state summation model for the two-variable Kauffman polynomial via planar 4-valent graphs.

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