## 1116-54-2445 Kyle Istvan\* (kistva1@math.lsu.edu), Khaled Qazaqzeh and Ayman Abouzaid. The Kauffman Polynomial of Periodic Links.

A periodic link has a diagram that is invariant under a finite-order rotation in the plane. I will define a necessary condition for a link to be p-periodic. It takes the form of a congruence between a specialization of the 2-variable Kauffman polynomial of a link and that of the link's mirror image. The result is derived using a state sum formula for the 2-variable polynomial, and can be used to verify (for example) Traczyk's result that the knot  $10_{101}$  is not 7-periodic. (Received September 22, 2015)