1115-54-259 **Kyle Istvan*** (kistva1@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 20, 2015)