

1163-57-1094 **Louis H Kauffman*** (kauffman@uic.edu), 5530 South Shore Drive, Apt 7C, Chicago, IL
60637-1946. *States in Formal Knot Theory*. Preliminary report.

This talk will review the state of the art for the presenter in working with the formal knot theory states (single cycle smoothing states) of link diagrams. The states were originally introduced by Kauffman to support a state summation model for the Alexander-Conway polynomial. They can be used to support the Jones polynomial and for generalizations to knotoids. They figure in models for the Heegard-Floer knot homology. We will discuss the structure of these states and conjectures about them. (Received September 14, 2020)