Meeting: 1001, Evanston, Illinois, SS 24A, Special Session on Hopf Algebras at the Crossroads of Algebra, Category Theory, and Topology

1001-57-286 **Louis H Kauffman*** (`kauffman@uic.edu`), Math UIC, 851 South Morgan Street, Chicacgo, IL 60607-7045. *Quantum Invariants of Virtual Knots and Links.* Preliminary report.

This talk considers quantum invariants of virtual knots and links. We consider two equivalence relations for virtual knot theory: regular isotopy (analogous to regular isotopy of classical knots) and rotational isotopy (where one no longer eliminates flat curls). We show that all quantum invariants of classical links extend to quantum invariants of rotational isotopy classes of virtual links. Specific examples will be discussed. (Received August 29, 2004)