

Meeting: 1000, Albuquerque, New Mexico, SS 5A, Special Session on Categories and Operads in Topology, Geometry, Physics and Other Applications

1000-57-55 **Sofia Lambropoulou*** (sofia@math.ntua.gr), Department of Mathematics, National Technical University of Athens, 157 80 Athens, Greece, and **Louis H. Kauffman**. *Virtual Braids and the L-move*. Preliminary report.

We formulate and prove a Markov theorem for virtual braids (and related categories) in the context of the *L*-move techniques. We derive from this formulation the previous results of Kamada as well as a new algebraic statement of this Markov theorem in terms of local algebraic moves in the virtual braid groups. This algebraic Markov theorem can be used for constructing invariants of virtual knots. (Received August 09, 2004)