1035-55-1077 Allison K Henrich^{*} (ahenrich[@]dartmouth.edu), 6188 KEMENY HALL, Hanover, NH 03755. A new invariant of virtual knots. Preliminary report.

In 1996, Louis Kauffman discovered a generalization of ordinary knots, which he called virtual knots. These virtual knots can be viewed as knots in thickened surfaces. I will introduce a combinatorial description of a virtual knot and define a new invariant that helps distinguish non-classical virtual knots from ordinary knots. This invariant is the universal Vassiliev invariant of degree one. (Received September 18, 2007)