Allison K Henrich* (ahenrich@dartmouth.edu), 6188 Kemeny Hall, Hanover, NH 03755. A sequence of degree one Vassiliev invariants for virtual knots. Preliminary report.

Virtual knot theory is a generalization of ordinary knot theory. First introduced by Louis Kauffman, virtual knots are closely related to knots in thickened surfaces. I will give a brief introduction to the field and present a new sequence of invariants for virtual knots. We will explore some applications of these invariants to classic problems in virtual knot theory. (Received February 25, 2008)