A polynomial invariant of virtual knots and links

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Abstract. Virtual knot theory was introduced by Professor Louis Kauffman in 1990s. One simple invariant of virtual knots, the odd writhe was defined by Kauffman himself in 2004. I will discuss the generalization of this invariant with two viewpoints: one comes from V. O. Manturov's parity axioms, the other approach was inspired by Professor Akio Kawauchi and Ayaka Shimizu's warping polynomial. If time permits, I will also give a similar generalization of the linking number of 2-component links.