998-57-174 Junalyn P. Navarra-Madsen* (junalyn@utdallas.edu), FO. 3.1, North Floyd Road, University of Texas at Dallas, Richardson, TX 75080, and Isabel K. Darcy (idarcy@math.uiowa.edu), Department of Mathematics, 14 MLH, University of Iowa, Iowa City, IA 52242. Colorability, Tangles and Quandles.

A diagram D(L) of a knot or link L is p-colorable, if each arc can be colored with an integer from $0, 1, 2, \dots, p-1$ such that at each crossing the relation $y + z - 2x = 0 \mod p$ holds, where x is the color on the overcrossing and y and z are the other two colors for the undercrossing arcs and at least two colors appear. Prime colorability, is an easy-visualize knot or link invariant. It can easily distinguish a trefoil from an unknot. Colorability can be applied to quandles and n-string tangles. (Received February 24, 2004)