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**Michael Ferrara, Ellen Gethner, Stephen G Hartke, Derrick Stolee\***  
(stolee@illinois.edu) and **Paul S Wenger**. *Distinguishing Extension Number*. Preliminary report.

A  $k$ -coloring of a symmetric object is *distinguishing* if no non-trivial, color-preserving automorphism exists. We introduce the *distinguishing extension number* to be the minimum number  $m$  such that for all sets of  $m$  elements and all  $k$ -colorings of the other elements can extend to a distinguishing coloring of the object. Using a common proof structure, we study this parameter for the cycle graph, the unit circle, and the real line. (Received August 30, 2012)