

**Meeting:** 1003, Atlanta, Georgia, SS 9A, AMS-MAA-SIAM Special Session on Research in Mathematics by Undergraduates, I

1003-54-918      **Layla K. Oesper\*** (Layla.Oesper@pomona.edu), Smith Campus Center Suite 118, 170 E. Sixth St. #1106, Claremont, CA 91711, and **Anna-Lisa Breiland** (abreilan@willamette.edu), 900 State Street B159, Salem, OR 97301. *p-Coloring Classes of Torus Knots*.

We develop a theorem for determining the  $p$ -colorability of any  $(m, n)$  torus knot. We also prove that any  $p$ -colorable  $(m, n)$  torus knot has exactly one  $p$ -coloring class. Finally, we show that every  $p$ -coloring of the braid projection of an  $(m, n)$  torus knot must use all of the  $p$  colors. (Received October 01, 2004)