

1064-20-157

Petr Vojtěchovský* (petr@math.du.edu), Department of Mathematics, University of Denver,
2360 S Gaylord St, Denver, CO 80208. *Searching for simple automorphic loops.*

A loop is said to be automorphic if all its inner mappings are automorphisms. Many deep structural results for groups remain valid for automorphic loops, particularly in the commutative case. Using the classification of primitive groups, we show that there are no simple automorphic loops of order less than 2500, excluding groups. This is joint work with Kenneth W. Johnson, Michael K. Kinyon and Gábor P. Nagy. (Received September 07, 2010)