1056-20-1598   **Daniel A Daly*** (`ddaly@semo.edu`), Southeast Missouri State University, Dept. of Mathematics, MS 6700, One University Plaza, Cape Girardeau, MO , and **Petr Vojtechovsky**. *Enumerating Nilpotent Loops.*

We will discuss the isomorphism problem for centrally nilpotent loops. Using techniques from cohomology and linear algebra, we can enumerate the isomorphism classes for nilpotent loops of order n for $n < 24$ and of order 2p for p a prime. This research is heavily computer aided and we will discuss how to teach a computer to count nilpotent loops. (Received September 22, 2009)