

Lucien Clavier

Enumeration of nilpotent loops up to isotopy

Comment.Math.Univ.Carolin. 53,2 (2012) 159–177.

Abstract: We modify tools introduced in [Daly D., Vojtěchovský P., *Enumeration of nilpotent loops via cohomology*, J. Algebra **322** (2009), no. 11, 4080–4098] to count, for any odd prime q , the number of nilpotent loops of order $2q$ up to isotopy, instead of isomorphy.

Keywords: loop, nilpotent, enumeration, cohomology, isomorphy, isotopy

AMS Subject Classification: 20N05

REFERENCES

- [Cla12] Clavier L., *About the autotopisms of abelian groups*, 2012, <http://arxiv.org/abs/1201.5655>.
- [DV09] Daly D., Vojtěchovský P., *Enumeration of nilpotent loops via cohomology*, J. Algebra **322** (2009), no. 11, 4080–4098.
- [Pfl90] Pflugfelder H.O., *Quasigroups and Loops: Introduction*, Heldermann, Berlin, 1990.
- [PV05] Phillips J.D., Vojtěchovský P., *The varieties of loops of Bol-Moufang type*, Algebra Universalis **54** (2005), no. 3, 259–271.