

1023-55-1225

Matthew Sean Miller* (mmiller7@uoregon.edu), Department of Mathematics, University of Oregon, Eugene, OR 97403. *Colie algebras and orbit configuration spaces of lens spaces*. Preliminary report.

Configuration spaces are not homotopy invariants. In 2004 Salvatore and Longoni gave the first example of homotopy equivalent spaces with inequivalent configuration spaces. Their methods used Massey products and orbit configuration spaces. I will generalize their methods by constructing a homeomorphism invariant of lens spaces using a colie algebra associated with the rational homotopy type of the orbit configuration spaces of lens spaces. (Received September 25, 2006)