

1127-14-58

Andrew Wilson Snowden* (asnowden@umich.edu), 530 Church St, Math Department, Ann Arbor, MI 48109. *Topological noetherianity for cubic polynomials.*

I will talk about recent joint work with Harm Derksen and Rob Eggermont in which we show that the space $\text{Sym}^3(\mathbf{C}^\infty)$ is topologically noetherian with respect to the action of GL_∞ . This result is the first piece of progress towards showing that twisted commutative algebras generated in degrees greater than 2 are noetherian. It also has applications to certain uniformity problems in commutative algebra. (Received January 15, 2017)