

1116-13-704

**Brooke S. Ullery\*** ([brookeullery@gmail.com](mailto:brookeullery@gmail.com)). *Constructing ideals with high Castelnuovo-Mumford regularity.*

The Castelnuovo-Mumford regularity of a module is a homological invariant that roughly measures complexity. Though straight-forward to define, it is difficult to find ideals in polynomial rings with high Castelnuovo-Mumford regularity. I will demonstrate a method that takes as input well-understood modules and outputs ideals which cut out schemes supported on linear spaces with high Castelnuovo-Mumford regularity and other desirable homological properties. (Received September 10, 2015)