

Resolutions of orbit closures of quiver representations

Kavita Sutar

Chennai Mathematical Institute, India

The problem of calculating syzygies of determinantal ideals is a classical one. In 1962, Eagon-Northcott calculated resolutions of determinantal ideals generated by maximal minors and in 1978 Lascoux solved the problem for ideals generated by minors of any size. The Kempf-Lascoux-Weyman geometric technique is a generalization of Lascoux's methods applicable in a wider setting.

In my talk I will describe an application of the geometric technique to calculating resolutions of orbit closures of quiver representations. These varieties can be viewed as a generalization of the determinantal varieties mentioned above.