

**Speaker:** Alexander Duncan

**Title:** Properties of Cohen Macaulay Schemes

**Abstract:** Cohen Macaulay Schemes (CM-schemes) play a fundamental role in constructing ring invariants which in turn can be used to classify varieties. We will demonstrate a few useful techniques involving these schemes after building a few examples. The fruitful applications of CM-schemes tend to stem from natural questions one asks while working under the familiarity and comfort of Cohen Macaulay rings. If time permits, we will introduce Macaulayfications of schemes.