

ISU ALGEBRA SEMINAR



SPRING 2017 SCHEDULE

Wednesdays, 11:00 AM-11:50 AM at STV 216

February 22, 2017

Speaker: Trevor McGuire (IWU)

Abstract: Free resolutions of modules are widely studied in a variety of contexts. In recent years, many combinatorial techniques have been developed to create resolutions for certain classes of modules. In this presentation, we will make an attempt to gather together many of those techniques in a large implication diagram. The diagram will include cellular resolutions, resolutions of edge ideals, resolutions with differential-graded structure, resolutions of ideals with linear quotients, resolutions of square-free ideals, resolutions of generic and strongly generic ideals, and perhaps some more. Many implications (or counterexamples) are known and will be discussed, and conjectures will be given for the unknown ones.