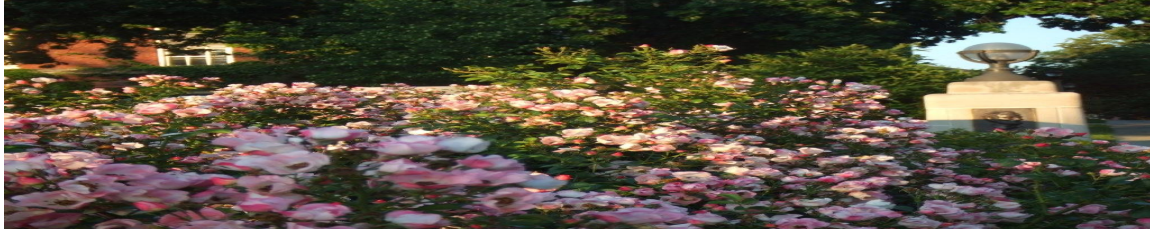


ISU ALGEBRA SEMINAR



FALL 2017 SCHEDULE

Thursdays, 12:00 PM-12:50 PM in Williams Hall, room 21

September 14, 2017

Speaker: Sunil Chebolu

Talk title: Fuchs' problem for finite p -groups : Part II

Abstract: More than 50 years ago, Laszlo Fuchs asked which groups can be realized as the group of units of a ring. I will present an overview of the research which I did with Keir Lockridge over the summer. We solved this problem for all finite p -groups in odd characteristics, and also for all finite p -groups which have a cyclic subgroup of index p in all characteristics. In particular, I will show an interesting connection which I discovered recently while driving on I-57 highway! This is the connection between Fuchs' problem and a classical problem in geometry which goes back to the ancient Greeks (which regular polygons can be constructed using straightedge and compass).