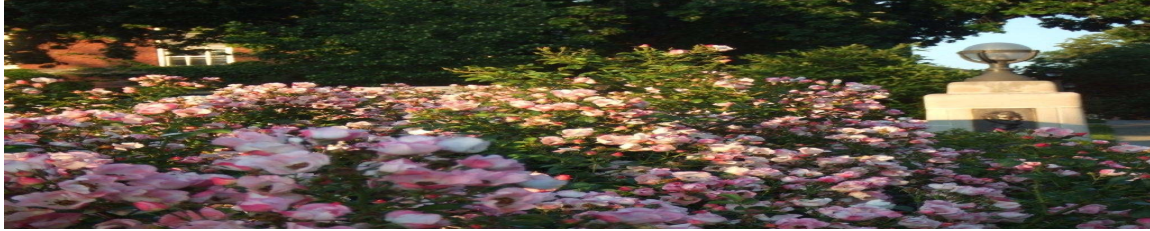


ISU ALGEBRA SEMINAR



Date: Wednesday, January 23, 2019

Time: 10:00 AM-10:50 AM

Location: STV 325

Speaker: Sunil Chebolu

Talk title: Is there an infinite field with an indecomposable multiplicative group?

Abstract: In 2016, we conjectured that the multiplicative group of an infinite field is always a decomposable group. In this talk I will provide ample evidence to support this conjecture. I will prove our main theorem which gives various restrictions on a possible counter example to the conjecture and using that I will show that this conjecture is true for several popular classes of fields arising in algebra and geometry including finitely generated fields, discrete valuation fields, absolutely algebraic fields, transcendental fields, local fields, global fields, fundamental perfect fields, and function fields.

This is joint work with Keir Lockridge and it is a sequel to our 2016 paper; see <https://arxiv.org/abs/1407.3481>