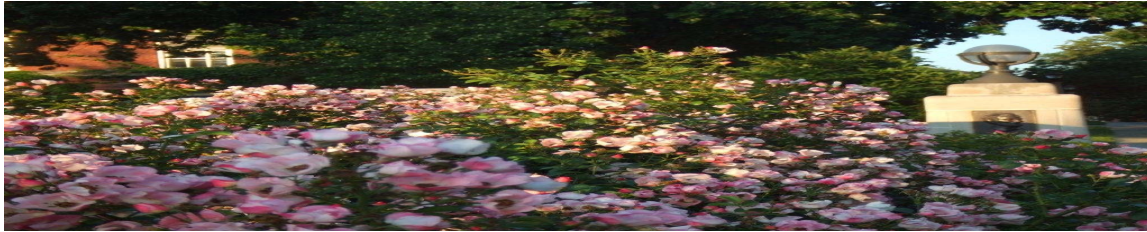


ISU ALGEBRA SEMINAR



SPRING 2018 SCHEDULE

Thursdays, 1:00 PM-1:50 PM at STV 352

Date: April 12, 2018

Speaker: Professor Wenhua Zhao

Talk Title: The LFED and LNED Conjectures for Algebraic Algebras

Abstract: The LFED and LNED conjectures claim, respectively, that the image of a locally finite derivation or \mathcal{E} -derivation of an algebra \mathcal{A} over a field \mathbb{k} of characteristic zero is a Mathieu subspace of \mathcal{A} and that every locally nilpotent derivation or \mathcal{E} -derivation of \mathcal{A} maps an ideal of \mathcal{A} to a Mathieu subspace of \mathcal{A} , where an \mathcal{E} -derivation of \mathcal{A} is a \mathbb{k} -linear endomorphism of \mathcal{A} of the form $\mathbb{I}d_{\mathcal{A}} - \mathbb{F}$ for some \mathbb{k} -algebra endomorphism \mathbb{F} of \mathcal{A} . In this talk we discuss the proofs of these two conjectures for the case of finite dimensional algebras, and also for some cases of algebraic algebras.

Reference: "The LNED and LFED Conjectures for Algebraic Algebras". arXiv:1701.05990 [math.RA]

