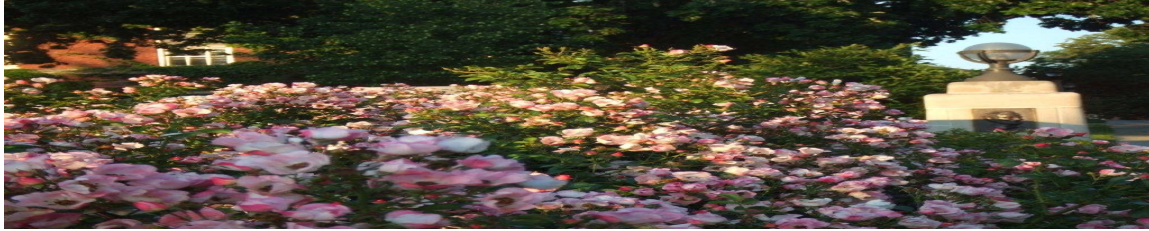


ISU ALGEBRA SEMINAR



Date: Thursday, April 18, 2019

Time: 1:00 PM-1:50 PM

Location: STV 325

Speaker: Wenhua Zhao

Talk title: The LFED and LNED Conjectures for Univariate Polynomial 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 some cases of the univariate polynomial algebras.

Reference: "Images of Ideals under Derivations and \mathcal{E} -Derivations of Univariate Polynomial Algebras over a Field of Characteristic Zero".
arXiv:1701.06125 [math.AC]