

Colloquium

presenting...

Dr. Jeremy Moore

Otterbein University

Preserving Linear Independence Among Units

We briefly review some results about Invertible Algebras (algebras having bases that consist entirely of units) and other related notions. We primarily focus on the property that sets of inverses of linearly independent invertible elements be also linearly independent. We refer to algebras (sets) with this property as fluid algebras (sets). Using results about direct sums of fluid algebras we will characterize which single-variable polynomials over a field yield fluid quotient algebras of the F -algebra $F[x]$. The fluidity of various families of algebras such as matrix rings and field extensions will be explored.

Wednesday, November 10th, 2021

2:30 – 3:20 p.m. Wallace Bldg. Room 149

Zoom: <https://eku.zoom.us/j/96365472056>

