

1135-VM-1800 **Derek DeSantis*** (derek.desantis@huskers.unl.edu). *On Operator Algebras Generated by Left Invertibles*. Preliminary report.

Operator algebras generated by partial isometries and their adjoints form the basis for some of the most well understood classes of C*-algebras. The C*-algebra generated by the unilateral right shift operator, known as the Toeplitz algebra, is an example. The right shift operator is left invertible – its left inverse being the unilateral left shift operator (the adjoint). Motivated by questions from linear equations in Hilbert spaces (frame theory), we wish to understand particular types of operator algebras generated by left invertible operators. Similar to the Toeplitz algebra, we investigate the norm closed operator algebra generated by a left invertible with a canonical left inverse (the Moore-Penrose inverse). (Received September 24, 2017)