

GENERALIZED INVERSES OF MATRICES AND THEIR APPLICATIONS

ABSTRACT. In this lecture we attempt to describe the ideas and properties of the generalized inverses of matrices. The Drazin inverse of a matrix $A \in M_n$ can be written as a polynomial of A . This helps us to use Krylov methods to solve singular linear systems by DGMRES method. Finally we illustrate applications of the method by examples.

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