

## System of Linear Equations, Gaussian Elimination

**Authors :** Rabia Khan, Nargis Munir, Suriya Gharib, Syeda Roshana Ali

**Abstract :** In this paper linear equations are discussed in detail along with elimination method. Gaussian elimination and Gauss Jordan schemes are carried out to solve the linear system of equation. This paper comprises of matrix introduction, and the direct methods for linear equations. The goal of this research was to analyze different elimination techniques of linear equations and measure the performance of Gaussian elimination and Gauss Jordan method, in order to find their relative importance and advantage in the field of symbolic and numeric computation. The purpose of this research is to revise an introductory concept of linear equations, matrix theory and forms of Gaussian elimination through which the performance of Gauss Jordan and Gaussian elimination can be measured.

**Keywords :** direct, indirect, backward stage, forward stage

**Conference Title :** ICAMNA 2016 : International Conference on Applied Mathematics and Numerical Analysis

**Conference Location :** Montreal, Canada

**Conference Dates :** May 16-17, 2016