

## **Abstract**

Solving systems of linear equations (or linear systems or, also, simultaneous equations) is a common situation in many scientific and technological problems. Many methods, either analytical or numerical, have been developed to solve them. A general method most used in Linear Algebra is the Gaussian Elimination, or variations of this. Sometimes they are referred to as “direct methods”. Basically, it is an algorithm that transforms the system into an equivalent one but with a triangular matrix, thus allowing a simpler resolution. In many cases, though, whenever the matrix of the system has a specific structure or is sparse and the like, other methods can be more effective.