

Linear Algebra and Matrix Analysis

Instructor: Nicolò Pecora (Nicolo.Pecora@unicatt.it)

Syllabus

- Vector spaces.
- Linear combination. Linearly dependent and independent vectors.
- Basis and dimension.
- Linear applications. Kernel and Image of a linear application. Matrix representation.
- Eigenvalues and eigenvectors.
- Quadratic forms.

Specific readings: SB: 13.3, 16.1-2, 23.1, 23.3-4, 27.1-6; L: 3-4, 8)

References:

Carl P. SIMON and Lawrence BLUME (SB), Mathematics for Economists. W.W. Norton & Company, 1994.

Serge LANG (L), Introduction to Linear Algebra, Springer, 1997.