

Ciclo di seminari su:
*CORRESPONDENCE ANALYSIS, LOG-RATIO ANALYSIS
AND POWER TRANSFORMATION*

relatore:

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ABSTRACT SEMINARIO 3

**Further Applications of Power Transformation and
Reparametrization in Multivariate Analysis**

The idea of pre-transforming, or recoding, the data prior to applying correspondence analysis (CA) has been encouraged by Benzécri, who saw CA as an all-purpose visualization engine, able to display any type of rectangular data matrix. In seminar 2 we showed how CA and LRA can be linked by a power transformation.

This idea can also be used to show the difference between:

- CA and Hellinger distance analysis
- CA of species abundance data in ecology and CA of presence-absence data
- multidimensional scaling (MDS) of original dissimilarities and power-transformed ones (often a fourth-root transformation is applied to abundance data in ecology)

Furthermore, reparametrization can be used to show how CA of a distance matrix can give an arbitrarily accurate solution of classical MDS, how CA relates to the so-called "non-symmetric version" of CA, and how CA applies to continuous-scale data using fuzzy coding.