

Paleontological data analysis in paleoclimatic and paleoecological reconstructions

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12 hours – 3 CFU

Short Program of the Course:

- Introduction to Matlab, Notes on univariate statistics. Extension to bivariate and multivariate data of basic methods
- Introduction to Compositional Data Analysis
- Methods of micropaleontological data analysis in paleoclimatic and paleoecological research: classification techniques, cluster analysis with aggregative and divisive methods, Discriminating analysis, Principal Components Analysis, Modern Analogues Technique and Regression based techniques. Application to compositional data
- Practice: Treatment of literature data sets in Matlab environment