Analysing network data: a distance-based approach for network comparison
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Samantha Riccadonna

Computational Biology Unit
Research and Innovation Centre - Fondazione Edmund Mach
samantha.riccadonna@fmach.it

ABSTRACT

Networks are a natural representation of complex systems, so common in our every-day life. Examples exist in all fields, from social networks to biology. Mathematically they are represented as graphs and this formalisation allows us to "easily" study some characteristics of the represented systems. However, the understanding of the behaviour of a system often requires the comparison of the same system in different conditions. For instance, comparing the wine stored in different wood barrels or at different temperatures can provide useful information to understand the impact of the storage on wine quality. As another example, cancer understanding can benefit from the comparison of gene expression networks evaluated on healthy against diseased tissues.

An introduction to basic concepts of the network framework will be provided and a distance-based approach to the network comparison issue will be presented

nell'ambito delle attività del PhD Course in
Models and Methods for Material and Environmental Sciences

Host: *Prof. Marina Cocchi; marina.cocchi@unimore.it*