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STATISTICAL DATA DEPTH

AN HACKING DAY AT THE
DEPARTMENT OF MATHEMATICS

Contents: It is well know in multivariate analysis that the coordinate-wise median is not an adequate measure of centrality. To order a data set in the real numbers, it is reasonable to follow the decreasing order of the absolute values of the difference between the percentiles of the points in the set and the percentile 50. Thus, the data set central points are the median(s) of the dataset. In contraposition, the component-wise median of a sample is not necessarily similar to any element of the sample and may fall outside the convex-hull of the data. This is because, if our data set is in a dimension higher than one, the median has to be calculated coordinate by coordinate. Tukey introduced the notion of statistical depth as a way to emulate the behavior of the one-dimensional quantiles, and median, to give a concept of order valid for spaces whose dimension is higher than one. In these seminars we will introduce the concept of depth for multivariate and functional spaces.

INFORMATION:

<http://datascience.maths.unitn.it/events/dd2019/index.html>



SCHEDULE

Friday 2019/09/06 9.30-12.45
@ Polo Ferrari 1, Room A221

DETAILS

- Venue: Polo Scientifico e Tecnologico F. Ferrari
- Language: English
- Admission: Course is open to everyone and free.
- How to apply: send an email to Claudio Agostinelli (claudio.agostinelli@unitn.it)



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DI TRENTO**

Dipartimento di Matematica