



Seminário

Grupo de Probabilidades e Estatística

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ON TESTING FOR A LARGE NUMBER OF OUTCOMES: RECENT RESULTS AND APPLICATIONS IN GENOMEWIDE STUDIES AND NGS EXPERIMENTS

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Abstract

High-dimensional data appear in genomewide studies and NGS experiments, among other fields. Here 'dimension' stands for the number of genes for which expression levels are recorded, or the number of next-generation sequencing (NGS) coverage levels along a DNA region. Hypothesis testing in such settings is complicated and standard procedures are typically useless because they may result in an excess of false discoveries or in a small statistical power. In this talk I will review some recent methodological contributions in the area of hypothesis testing from high-dimensional data, with the emphasis in applications, which will serve to illustrate how misleading a standard statistical analysis can be.

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