

# Finding signal in high dimensional data with multiple testing

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To find the signal in high dimensional data coming from microarrays or neuroimaging, a standard task is to make comparisons between the observed data and a control, for several items at the same time (genes, probes, voxels). This leads to testing simultaneously a large number of null hypotheses, which requires to define type I error criteria and procedures that properly account for the multiplicity. In this talk, we will present some recent methods that tackle this multiple testing issue. In particular, we will take care of the delicate situation where there are some dependencies between the individual tests.