

# ON CORRECTIONS OF CLASSICAL MULTIVARIATE TESTS FOR HIGH-DIMENSIONAL DATA

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## **Abstract**

First a short introduction to the close link between random matrix theory and high-dimensional data analysis will be given while focusing on large sample covariance matrices, Mar?enko-Pastur theorem and Bai-Silverstein theorem. The aim of the talk is to explain why traditional multivariate methods need to be corrected to cope with high-dimensional effect. To this end, recent developments on classical one-sample problem and two-samples problem will be presented.