

## **Two-Sample Test for Equal Mean Functions for Functional Data**

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With modern recording equipments, functional data are collected frequently in many scientific fields. To analyze such functional data, more and more techniques have been proposed and studied. In this talk, we introduce and study an L2-norm based global test for comparing the mean functions of two samples of independent curves. We show that the proposed statistic has an asymptotic distribution of  $\chi^2$ -type mixtures and enjoys good asymptotic powers. We illustrate the test via simulation studies and real data applications.

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