RANDOM PROJECTIONS AND GOODNESS-OF-FIT TESTS IN INFINITE-DIMENSIONAL SPACES

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Abstract. In this paper we provide conditions under which a distribution is determined by just one randomly chosen distribution. Then we apply our results to construct goodness-of-fit tests for the one- and two-sample problems. We include some simulations as well as the application of our results to a real data set.

Our results are valid for every separable Hilbert space.

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2000 *Mathematics Subject Classification.* Primary 62H15; Secondary 28C20, 60B11 and 60E05.

Key words and phrases. Cramér-Wold theorem, random projections, Hilbert spaces, goodness-of-fit tests, Kolmogorov-Smirnov projected test, single null hypothesis, two samples.

First author partially supported by the Spanish Ministerio de Ciencia y Tecnología, grant MTM2005-08519-C02-02.

Third author partially supported by grants from NSERC and the Canada research chairs program.