

# Multivariate Kurtosis with the R Package MultiKurt

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## Abstract

MultiKurt is an R package purported to describe, testing and visualize multivariate kurtosis. Firstly, it computes the main kurtosis-related matrices, as the fourth-moment matrix and the cokurtosis. Secondly, it incorporates state-of-the-art algorithms for computing linear projections which either maximize, minimize, or remove kurtosis. Thirdly, MultiKurt computes Mardia's and Koziol's kurtoses, together with the related normality tests. The usage of MultiKurt is illustrated with the Iris data set.

## Keywords

Kurtosis, multivariate normality testing, projection pursuit, R package.

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