

Robust Statistics Collaborative Package Development: 'robustbase'

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R functions for robust statistics have been available for a while, in the standard 'stats' and the recommended 'MASS' package. However, researchers specialized in the field have for a while felt the lack of state-of-the-art methods on one hand, and of R tools that make robust data analysis as seamless as classical one, on the other hand.

Partly as result of a focused workshop last October, we've decided to start developing a package with at least two goals: - First, it should cover modern methods and algorithms for robust statistics, and thereby focus on methodology from the new monograph of Maronna, Martin and Yohai (2006). - Second, it should hopefully become the base of much further R developments within the field of robustness, and hence possibly define basic classes and methods.

The talk will give an overview on the new functionality in the package, notably robust GLM including model selection (Valentin Todorov will cover his own contributions in his own talk) but also comment on the experiences and tools used for collaborative package development (one maintainer, several package authors in diverse locations).