

Title: **Automatic Adaptive Estimation via the Bootstrap**

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Abstract:

We construct an efficient adaptive estimator for the center of an unknown symmetric density f . The “bootstrap choice of tuning parameters” technique is used to estimate the best weights for an L -estimator of location. This is the first application of the method to the choice of an infinite-dimensional tuning parameter. Unlike other methods of adaptive estimation, the construction does not depend on previous knowledge of a good estimator for f , and is therefore “automatic” in principle.