On Optimal Smoothing Parameter Choice in Deconvolution Problems

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The SIMEX method for deconvolution enjoys a range of attractive features, among them the fact it needs little by way of tuning. However, it also suffers drawbacks, including inconsistency. We suggest that SIMEX be employed for smoothing-parameter choice in other deconvolution methods (based on, for example, kernels, orthogonal series or ridging), rather than for constructing estimators itself. In this context SIMEX has very broad application, not just to different estimator types but to different deconvolution problems.

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