

# An adaptive sequential design for model discrimination and parameter estimation in non-linear nested models

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## Abstract

In this work, an adaptive sequential design is computed with the goal of both discriminating and estimating more than two nested non-linear models. At each step of the sequential procedure, an optimum design for this double aim is computed through the DKL-optimality criterion. The procedure is inspired to the sequential method of Biswas and Chaudhuri (2002), which can be applied only in the set up of nested linear models.

## Keywords

Adaptive sequential design, Optimum designs of experiments, DKL-optimality, Consistency of selection.

## References

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- Tommasi, C. (2009). Optimal designs for both model discrimination and parameter estimation. *J. Statist. Plann. Inference* 139, 4123–4132.