

# Adaptive MCMC for doubly intractable distributions

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Bayesian inference in the context of biophysical problems may lead to posterior densities with two unknown quantities, the normalizing constant and an intractable multiplicative factor in the likelihood function.

Not being able to evaluate the likelihood function leads to computational issues in classical (adaptive) MCMC algorithms and in the past years various methods have been suggested to overcome this problem.

We discuss an adaptive MCMC scheme that relies on approximating the likelihood function and, moreover, we present a strong law of large numbers for bounded measurable functions.

**Primary author:** HOFSTADLER, Julian (University of Passau)

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