# New Tamed Langevin MCMC algorithms and their applications.

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Recently, Langevin-based algorithms have grown in popularity, because of their importance in the fields of sampling and optimization. The majority of works in the current literature deals with problems which involve objective functions with linearly-growing gradients (drift coefficients in the respective Langevin SDE). Inspired by the taming technology developed in Hutzenthaler et al. (2012) and Sabanis (2013), Sabanis (2016), we propose new Langevin-type MCMC algorithms to deal with cases where the gradient of the objective functions grows superlinearly. We provide non-asymptotic analysis of the new algorithms' convergence properties and their application in optimization.

## References

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