

# Stabilized methods for deterministic and stochastic multiscale problems

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Numerous methods have been recently developed for deterministic and stochastic differential equations with multiple scales. A successful approach for stiff time dependent differential equations relies on stabilization techniques and the common wisdom is to use implicit solvers to damp the fast scales present in the problem. We will see that efficient explicit stabilized methods can be constructed for stiff problems and we will discuss recent developments of such methods for stochastic differential equations.

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