A new linearly implicit energy-preserving exponential method for conservative or dissipative systems by **Lu Li**

Abstract
In this work, we propose a linearly implicit exponential integrator that preserves the invariant or the Lyapunov functions for the conservative or dissipative systems by combining the idea of exponential integrators and discrete gradient methods. Numerical simulations are shown to confirm the conservative properties of the methods, and to demonstrate the efficiency of the methods when compared to other fully implicit schemes.