

Talk announcement

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Multigrid in Time for Time-Periodic Parabolic Evolution Problems

We present a parallel-in-time multigrid method for the solution of time-periodic parabolic evolution problems, with possibly nonlinear coefficients. After discretizing with finite elements in space and with backward Euler in time, we solve the resulting linear block-system of equations by means of a multigrid in time method. As a smoother we use a block-Jacobi method, which can be applied in parallel. We present numerical experiments based on applications in magneto-quasistatics.