Laboratoire Européen Associé CNRS
Franco - Roumain
Math - Mode

Analysis of a Modified Parareal Algorithm for Second-Order Ordinary Differential Equations

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Abstract:

The parareal algorithm is a numerical method to integrate evolution problems on parallel computers. The performance of the algorithm is well understood for diffusive problems, and it can have spectacular performance when applied to certain non-linear problems. Its convergence properties are however less favorable for hyperbolic problems. We present and analyze a variant of the parareal algorithm, recently proposed in the PITA framework for systems of second order ordinary differential equations.

Miercuri, 27 Februarie 2013, ora 11:00 la sediul IMAR, sala 306 "C. Banica"