Acceleration techniques for approximating the matrix exponential

Marina Popolizio

Università degli Studi di Bari, Dipartimento di Matematica, Bari, Italy

The recent interest in accelerating the numerical approximation of matrix functions inspired this work. Starting from Standard Krylov subspace methods we describe efficient techniques which allow to efficiently compute the exponential of quite large dimension matrices.

Computational aspects are addressed. Moreover, we present numerical experiments comparing classical integration methods with the matrix approach to solve standard ODEs.

References

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