

Symmetric block BVMs for the solution of conservative systems

Francesca Mazzia* Raffaella Pavani[†]

Abstract

We present some numerical experiments with the Matlab code TOMG, based on symmetric block Boundary Value Methods, a class of methods for which experiments have shown that the numerical solution nearly-preserve some type of invariants over long-time integration.

Keywords: Hamiltonian Problems, Linear Multistep Methods, Boundary Value Methods,.

*Dept. of Mathematics, Università di Bari, Via Orabona, Bari, Italy

[†]Dept. of Mathematics, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy