

Title: A Unified View of Sweeping Algorithms for Helmholtz

Abstract: Sweeping algorithms for solving time harmonic equations have attracted a lot of attention. They are domain decomposition methods where local solves are performed in a given order. We present them in a unified framework which enables to write new ones along with their amplification error operators. Numerical comparisons of some algorithms in the 2D and 3D cases are also shown. This is a joint work with H. Calandra, N. Bouziani and P.H. Tournier.