

**Hermitian and Skew-Hermitian Splitting Preconditioners
for Weighted Toeplitz Least Squares Problems**

Michele Benzi
Department of Mathematic and Computer Science
Emory University
Atlanta, GA (USA)

The Hermitian and Skew-Hermitian splitting (HSS) preconditioner is applied to saddle point systems arising in the solution of weighted Toeplitz least squares problems. Bounds on the eigenvalues of the preconditioned matrix are given in terms of problem and algorithmic parameters, and numerical experiments are used to illustrate the performance of the preconditioner.
This is joint work with Michael Ng (University of Hong Kong).