1116-65-1653 **Duk-Soon Oh*** (duksoon.oh@rutgers.edu), **Olof B. Widlund** (widlund@cims.nyu.edu), **Clark R. Dohrmann** (crdohrm@sandia.gov) and **Stefano Zampini** (stefano.zampini@kaust.edu.sa). *Adaptive BDDC methods for problems posed in $H(div)$.*

A BDDC preconditioner is defined by a coarse component, expressed in terms of primal constraints and a weighted average across the interface between the subdomains, and local components given in terms of Schur complements of local subdomain problems. BDDC methods for vector field problems discretized with Raviart-Thomas finite elements are introduced. Our methods are based on an adaptive selection of primal constraints developed to deal with highly oscillating coefficients. Bounds on the condition number of the preconditioned linear system are also provided which are independent of the values and jumps. (Received September 20, 2015)