1006-94-168 **Mihaela D. Quirk*** (`pal@lanl.gov`), Los Alamos National Laboratory, Decision Applications Division, MS K575, Los Alamos, NM 87545, and **Christopher M. Brislawn** (`brislawn@lanl.gov`), Los Alamos National Laboratory, MS B265, Los Alamos, NM 87545.

Two-channel Adaptive Orthonormal Filter Banks for Hyperspectral Imagery. Preliminary report.

This work presents the application of the newest results for the design of optimal finite impulse response perfect reconstruction filter banks. An algorithm to find these optimal filter banks is introduced. This algorithm is used to design coding gain optimal two-channel finite impulse response filter banks that may be embedded into JPEG-2000 Standard for more efficient compression of multicomponent images. An example for hyperspectral remote sensing images is given. (Received February 14, 2005)