1116-42-463 **Guozhen Lu** and **Lu Zhang*** (eu4347@wayne.edu). *L^p estimate for a bi-parameter trilinear pseudo-differential operator.*

We mainly study the L^p Hölder type estimate for a bi-parameter trilinear pseudo-differential operator, where the symbol is a product of two standard symbols in the bi-parameter Hörmander class $BBS^0_{1,0}$. Usually the difficulty for such work is to establish a Hölder type estimate for a corresponding bi-parameter flag type Fourier multiplier operator. In our work, we establish a modified result to overcome that difficulty, which enables us to get the desired L^p estimate for the bi-parameter trilinear pseudo-differential operators. In the proof we take advantage of a localization argument and some analysis on paraproducts as well. Such operators are bi-parameter pseudo-differential variants of flag paraproducts studied by of C. Muscalu. (Received September 02, 2015)