1108-42-363   **Guozhen Lu** and **Lu Zhang*** (`eu4347@wayne.edu`), Department of Mathematics, Wayne State University, Detroit, MI 48201. *L^p estimate for a trilinear pseudo-differential operator.*

We study the L^p estimate for a trilinear pseudo-differential operator with flag symbols. That is, the symbols are in the form of the product of two standard symbols from the Hömander class $BS_{1,0}^0$. This operator is an extension from the trilinear operator with flag singularities, with the symbols in the form of product of two Marcinkiewcz-Mikhlin-Hörmander symbols. This extends the work of C. Muscalu on L^p estimates for a trilinear operator of Fourier multipliers of flag singularity to the case of pseudo-differential operator setting. Our work is based on the use of paraproducts and some careful decay estimates. (Received January 18, 2015)