

**EQUIVALENCES OF (QUASI-)NORMS IN A CERTAIN
VECTOR-VALUED FUNCTION SPACES AND ITS APPLICATIONS TO
MULTILINEAR OPERATORS**

BAE JUN PARK

ABSTRACT. In this talk we will study some (quasi-)norm equivalences, involving $L^p(l^q)$ norm, in a certain vector-valued function space and extend the equivalences to $p = \infty$ and $0 < q < \infty$ in the scale of Triebel-Lizorkin spaces. As an immediate consequence of our results, $\|f\|_{BMO}$ can be written as $L^\infty(l^2)$ norm of a variant of f . We will also discuss some applications to multilinear Hörmander multiplier and multilinear pseudo-differential operator of type (1,1).

KOREA INSTITUTE FOR ADVANCED STUDY, SOUTH KOREA
E-mail address: qkrqowns@kias.re.kr