

UNCONDITIONAL BASES IN VARIABLE LEBESGUE SPACES

Nino Samashvili

e-mail: nino.samashvili187@ens.tsu.edu.ge

DEPARTMENT OF MATHEMATICAL ANALYSIS, TBILISI STATE UNIVERSITY

CHAVCHAVADZE ST. 1

In case when Hardy-Littlewood maximal operator is bounded in $L^{p(\cdot)}(\mathbb{R}^n)$ variable Lebesgue spaces, any regular wavelet system is an unconditional basis in this space. We investigate the similar problem when local Hardy-Littlewood maximal operator is bounded in $L^{p(\cdot)}(\mathbb{R}^n)$ space.