

L_p -SPACES IN THE ANCHORED AND ANOVA SETTING

Aicke Hinrichs

Johannes Kepler University Linz, Austria
aicke.hinrichs@jku.at

We extend the recent investigation of G. Wasilkowski on the equivalence of weighted anchored and ANOVA L_1 and L_∞ norms of function spaces with mixed partial derivatives of order one. Among other norms, we consider L_p norms for $1 \leq p \leq \infty$ and confirm the conjecture that for product weights, summability of the weight sequence is necessary and sufficient.

Joint work with Jan Schneider (University of Rostock, Germany).