Publ. Mat. **60** (2016), 485–500
DOI: 10.5565/PUBLMAT_60216_06

INTEGRAL RESTRICTION FOR BILINEAR OPERATORS

Weiren Zhao, Meng Wang, and Guoping Zhao

Abstract: We consider the integral domain restriction operator T_Ω for certain bilinear operator T. We obtain that if (s, p_1, p_2) satisfies $\frac{1}{p_1} + \frac{1}{p_2} \geq \frac{2}{\min\{1,s\}}$ and $\|T\|_{L^{p_1}\times L^{p_2}\to L^s} < \infty$, then $\|T_\Omega\|_{L^{p_1}\times L^{p_2}\to L^s} < \infty$. For some special domain Ω, this property holds for triplets (s, p_1, p_2) satisfying $\frac{1}{p_1} + \frac{1}{p_2} > \frac{1}{\min\{1,s\}}$.

2010 Mathematics Subject Classification: 42B25.

Key words: Integral restriction, multilinear operator.