

**CONTINUITY PROPERTIES FOR THE MAXIMAL
OPERATOR ASSOCIATED WITH THE COMMUTATOR
OF THE BOCHNER-RIESZ OPERATOR**

ZONGGUANG LIU, GUOZHEN LU AND SHANZHEN LU*

Abstract

In this paper, we obtain some strong and weak type continuity properties for the maximal operator associated with the commutator of the Bochner-Riesz operator on Hardy spaces, Hardy type spaces and weak Hardy type spaces.

2000 *Mathematics Subject Classification.* 42B20, 35J05.

Key words. Bochner-Riesz operator, commutator, Hardy space, Hardy type space, weak Hardy type space, $BMO(\mathbb{R}^n)$.

*G. Lu was partly supported by US NSF grant DMS9970352 and S. Lu was partly supported by the National 973 Project Foundation of China (G19990751).