

1077-46-1743

Guimei An and **Jung-Jin Lee***, Department of Mathematics and Statistics, 50 College Street,
South Hadley, MA 01075, and **Zhong-Jin Ruan**. *p-operator spaces and approximation properties*.

Let G be a discrete group. Haagerup showed that G is weakly amenable if and only if $C_\lambda^*(G)$ has the completely bounded approximation property. Haagerup and Kraus later considered a slightly weaker property, say the approximation property, and showed that G has the approximation property if and only if $C_\lambda^*(G)$ has the operator approximation property. We extend these results using p -operator space, a generalization of operator spaces modeled on L_p spaces. This is a joint work with Guimei An and Zhong-Jin Ruan. (Received September 20, 2011)