H. Heyer
Mathematisches Institut, Universität Tübingen, Auf der Morgenstelle 10, 72076 Tübingen, Germany
herbert.heyer@uni-tuebingen.de

S. Kawakami
Dept. of Mathematics, Nara University of Education, Takabatake-cho, Nara 630-8528, Japan
kawakami@nara-edu.ac.jp

An Imprimitivity Theorem for Representations of a Semi-Direct Product Hypergroup

The purpose of the present paper is to establish an imprimitivity theorem for representations of a semi-direct product hypergroup $K = H \rtimes_\beta G$ defined by a smooth action β of a locally compact group G on a hypergroup H. The proof of the theorem relies on a smooth irreducible absorbing action α of K on a locally compact space X and on an imprimitivity condition for the triplet $(K, C_0(X), \alpha)$.

Keywords: Induced representation, imprimitivity theorem, hypergroup.

MSC: 22D30, 22F50, 20N20, 43A62