Factorizations of Hopf quasigroups

By RAMÓN GONZÁLEZ RODRÍGUEZ (Vigo)

Abstract. In this paper, we introduce the notion of factorization in the Hopf quasigroup setting, and we prove that if A and H are Hopf quasigroups such that their antipodes are isomorphisms, a Hopf quasigroup X admits a factorization as $X = AH$ iff X is isomorphic to a double cross product $A \bowtie H$ as Hopf quasigroups.

RAMÓN GONZÁLEZ RODRÍGUEZ
CITMAga
15782 SANTIAGO DE COMPOSTELA
AND
DEPARTMENT OF APPLIED MATHEMATICS II
UNIVERSIDADE DE VIGO
E-36310 VIGO
SPAIN