

GROUP-2-GROUPOIDS AND 2G-CROSSED MODULES

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Abstract

The main idea of this paper is to construct the group structure on a 2-groupoid which we call *group-2-groupoid*. As an algebraic structure corresponding to a group-2-groupoid, a *2G-crossed module* is obtained on the structure of crossed modules. Then we prove the categorical equivalence between group-2-groupoids and 2G-crossed modules.

Keywords:2-Groupoid, Group-2-Groupoid, 2G-Crossed Module

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