

Canonical biassociative groupoids

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A groupoid $\mathbf{G} = (G, \cdot)$ is said to be biassociative iff every subgroupoid generated by at most two elements is a subsemigroup of \mathbf{G} . The class of biassociative groupoids is a variety (it will be denoted by $\mathcal{B}ass$). A construction of free objects in $\mathcal{B}ass$ with a free basis B is given in the paper of S. Ilić, B. Janeva, N. Celakoski: "Free biassociative groupoids" (Journal of Mathematics, Novi Sad, in print). Free objects in $\mathcal{B}ass$ are constructed using a chain of partial biassociative groupoids that satisfy certain properties. The obtained free objects in this variety are not canonical. The aim of this paper is a construction of canonical objects in $\mathcal{B}ass$ with a free basis B , because a description of a free groupoid in a given variety as a canonical one is more convenient for further investigations.