

**On 4-generated axial algebras of Jordan type half**

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Axial algebras are a class of non-associative commutative algebras whose properties are defined in terms of the fusion law. When this fusion law is graded, the algebra has a naturally associated automorphism group, and thus axial algebras are related to group theory. Examples of axial algebras include most Jordan algebras and the Grice algebra. In this talk, we introduce the notion of axial algebra and concentrate on axial algebras of Jordan type half.