

## ***bi-BL-ALGEBRA***

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### **Abstract**

In this paper, we introduce the notion of a *bi-BL*-algebra, *bi*-filter, *bi*-deductive system and *bi*-Boolean elements of a *bi-BL*-algebra and deal with *bi*-filters in *bi-BL*-algebra. We study this structure and construct the quotient of *bi-BL*-algebra. Also present a classification for examples of proper *bi-BL*-algebras.

**Keywords:** *bi-BL*-algebra, *bi*-filter, *bi*-deductive system, *bi*-Boolean elements of a *bi-BL*-algebra.

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