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The commingling of commutativity and associativity in Bol loops

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Abstract: Commutative Moufang loops were amongst the first (nonassociative) loops to be investigated; a great deal is known about their structure. More generally, the interplay of commutativity and associativity in (not necessarily commutative) Moufang loops is well known, e.g., the many associator identities and inner mapping identities involving commutant elements, especially those involving the exponent three. Here, we investigate all of this in the variety of Bol loops.

Keywords: Bol; Moufang; loop; commutant; associator

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