S-BILOOPS

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The concept of bigroup was started by Maggu in the year 1994. Later in the year 1998 fuzzy bigroups was defined by W.B.Vasantha and Meiyappan. Several nice characterization theorems was obtained in this direction. Loops are nothing but groups which are non associative. That is the class of loops contains property the class of groups. In the year (2002) biloops was introduced by W.B.Vasantha. Biloops overcomes the very difficulty of finding any nice algebraic structure for the union of the subloops which in general has no proper algebraic structure. Here we define a biloop to be a set $(L, +, \bullet)$ endowed with two binary operations '+' and '$\bullet$' such that $L = L_1 \cup L_2$ where L_1 and L_2 are two proper subsets of L with $(L_1, +)$ is a loop and $(L_2, \bullet)$ is a group or a loop. The Smarandache biloop or S-biloop is nothing but a biloop in which both $(L_1, +)$ and $(L_2, \bullet)$ are S-loops. Several interesting results in this direction are obtained.

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