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Titulo: "Non-standard cohomologies and central extentions of Bol loops."

**Abstract.**

Let  $C = \sum_i \oplus C^i$  be a graded abelian group and  $\delta : C \rightarrow C$  be a graded homomorphism of degree one:  $\delta : C^i \rightarrow C^{i+1}$ . If  $\delta^2 = 0$ , then  $(C, \delta)$  is a co-complex and we can define a standard cohomologies. In the case  $\delta^2 \neq 0$  we define some "non-standard" cohomologies of  $(C, S, \delta)$  where  $S$  is a graded subgroup of  $C$ . Finally we give an interpretation of second comology of some non-standard co-complex  $(C, S, \delta)$  in the term of central extentions of Bol loops.