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A super version of the Connes–Moscovici Hopf algebra, \mathcal{H}_1

We define a super version of the Connes–Moscovici Hopf algebra, \mathcal{H}_1 . For that, we define the super group $G^s = \text{Diff}^+(\mathbb{R}^{1,1})$ of the orientation preserving diffeomorphisms of the super line $\mathbb{R}^{1,1}$ and introduce two (super) sub-groups G_1^s and G_2^s of G^s , where G_1^s is the super group of affine transformations. The super Hopf algebra \mathcal{H}_1^s is defined as a certain bicrossproduct super Hopf algebra. This bicrossproduct is constructed by two super Hopf algebras attached to G_1^s and G_2^s .