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A New \mathbb{Z}_3 -Graded Quantum Group

We introduce a \mathbb{Z}_3 -graded version of the exterior (Grassmann) algebra with two generators. Using this object we obtain a new \mathbb{Z}_3 -graded quantum group denoted by $\mathcal{O}(\widetilde{GL}_q(2))$ and discuss some of its properties.

Keywords: \mathbb{Z}_3 -graded exterior algebra, \mathbb{Z}_3 -graded quantum group, \mathbb{Z}_3 -graded Hopf algebra.

MSC: 17B37, 81R60