1096-VJ-1705 **Ik Jae Lee*** (leei@rowan.edu), Department of Mathematics, Rowan University, Glassboro, NJ 08028. *Algebra with Anyonic Braiding.* Preliminary report.

For any $\xi \in \mathbb{C}^*$, the family of linear maps given on homogeneous elements by

$$\sigma(a \otimes b) = \xi^{|a||b|}\, b \otimes a$$

defines a braiding on the category of $\mathbb{Z}$-graded complex vector spaces. If $|\xi| = 1$ due to relation to the (2+1)-dimensional physics (cf. the fractional quantum Hall effect), such a braiding is called an **"anyonic braiding"**. In this talk, we explore what happens to algebra with anyonic braiding. (Received September 16, 2013)