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Menevse Eryuzlu* (meryuzlu@asu.edu), **John Quigg** and **Steven Kaliszewski**. *Exact Sequences in the Enchilada Category*.

Imprimitivity theorems provide a fundamental tool for studying the representation theory. It was shown that all of imprimitivity theorems can be viewed as natural isomorphisms between various crossed-product functors among certain equivariant categories. In the proof, we see that there exists a category (the *enchilada category*) in which objects are C^* -algebras, and the morphisms from A to B are the isomorphism classes of $A - B$ correspondences. We study whether exact sequences exist in this category and try to see if the crossed-product functors preserve exact sequences. Our goal is to determine whether we can have a better understanding of the Baum-Connes conjecture by using enchilada categories. (Received September 16, 2019)