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Quantitative E-theory

Quantitative E-theory is an ongoing project joint with Nate Brown which aims to create a new approach to tackling results like the Universal Coefficient Theorem for new classes of C^* -algebras. In recent years, many people have been working on classifying C^* -algebras and these results assume the UCT, which requires further understanding. The inspiration is work by Oyono-Oyono-Yu, who used a quantitative approach of K-theory to prove the Künneth Theorem for new classes of C^* -algebras. An ongoing project of Willett-Yu extends the quantitative approach to the KK-context. Quantitative E-theory is a generalisation of E-theory and so I will begin my talk by defining the notion of E-theory and talk about how we get the definition of Quantitative E-theory. Then I will state results connecting this definition to E-theory.