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Terry A Loring* (loring@math.unm.edu), Department of Mathematics and Statistics, University of New Mexico, Albuquerque, NM 87131. Projective and Semiprojective C*-Algebras Related to K-Theory. Preliminary report.

The semiprojectivity of \mathbb{C} , and the projectivity of $\mathbb{C}_0(0,1]$, are familiar to anyone who has tried to lift a projection to a projection, and failing that, has lifted it to a positive contraction. In the picture of K_0 of a C^* -algebra that is based on $q\mathbb{C}$ there is an analogous situation. First, $q\mathbb{C}$ is semiprojective. Second, there is a projective C^* -algebra that maps onto $q\mathbb{C}$ that is projective and, I hope, interesting. It is the universal C^* -alebra A that has a T in $\mathbf{M}_2(\tilde{A})$ with

$$0 \le T = \left[\begin{array}{cc} 1 - t_{11} & t_{12} \\ t_{21} & t_{22} \end{array} \right] \le 1$$

and

$$t_{11}t_{22} = 0.$$

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