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**Matthew Neal** (nealm@denison.edu), Denison University, Granville, OH 43023, and **Bernard Russo\*** (brusso@math.uci.edu), University of California, Irvine, CA 92697-3875. *On projective rigidity of Banach spaces.*

A category is *projectively stable* if the idempotent morphisms preserve the class. Notable examples: [ $L^1$ -spaces, contractions] (Douglas 1965), [ $C^*$ -algebras, completely positive maps] (Choi-Effros 1977), [ $JC^*$ -triples, contractions] (Friedman-Russo 1985). A *JC\*-triple* is a norm closed subspace of  $B(H, K)$  which contains  $aa^*a$  whenever it contains  $a$ .

In the other direction, a category is *projectively rigid* if every sub-object of an object in the category is the image of that object by an idempotent morphism. Notable examples: [ $L^1$ -spaces, contractions] (Douglas 1965), [preduals of von Neumann algebras, contractions] (Kirchberg 1993), [preduals of ternary rings of operators, complete contractions] (Ng-Ozawa 2001).

**THEOREM.** The category [preduals of  $JC^*$ -triples with no Hilbertian summands, contractions] is projectively rigid.

Since preduals of von Neumann algebras are non-commutative  $L^1$ -spaces, the theorem is a statement about non-associative  $L^1$ -spaces. (Received September 16, 2008)