

1046-46-246

**Weihua Li\*** ([whli@unh.edu](mailto:whli@unh.edu)), Department of Mathematics and Statistics, Kingsbury Hall,  
Durham, NH 03824, and **Don Hadwin**. *Some results on approximate liftings.*

We prove approximate lifting results in the C\*-algebra and von Neumann algebra settings. In the C\*-algebra setting, we show that two (weakly) semiprojective unital C\*-algebras, each generated by  $n$  projections, can be glued together with partial isometries to define a larger (weakly) semiprojective algebra. In the von Neumann algebra setting, we prove lifting theorems for trace-preserving \*-homomorphisms from abelian von Neumann algebras or hyperfinite von Neumann algebras into ultraproducts. We also extend a classical result of S. Sakai by showing that a tracial ultraproduct of C\*-algebras is a von Neumann algebra, which yields a generalization of Lin's theorem on almost commuting self-adjoint operators with respect to  $\|\cdot\|_p$  on any unital C\*-algebra with trace. (Received August 22, 2008)