

1096-47-1225 **J E Pascoe*** (jpascoe@math.ucsd.edu). *The noncommutative lifting principle.*

The *noncommutative lifting principle* is a guiding principle which states that if a theorem in several complex holds by the virtue of multivariable operator theoretic methods, then there is an analogue in the noncommutative setting. We give a survey of concrete successful applications of this principle including the transfer function realization formula for bounded analytic functions, the Positivstellensatz, and Löwner's theorem on the continuation of matrix monotone functions. (Received September 13, 2013)