1047-46-459   **Caleb A Eckhardt*** (`ceckhard@uiuc.edu`), 1409 W. Green St., Urbana, IL 61801. *Perturbations of Finite Rank Maps with applications to Nuclear C*-algebras.*

In this talk we will give a complete answer to the question "Under what conditions can an injective completely positive contraction from $M_n(\mathbb{C})$ into $B(H)$ (the space of bounded operators on a Hilbert space) be perturbed to a complete order embedding?" In particular, we are interested in the cases when the perturbation can be made independent of the dimension of $M_n(\mathbb{C})$. We finish with some applications to $\mathcal{OL}_\infty$ structure of nuclear C^*-algebras. (Received February 03, 2009)