KRISTIN COURTNEY, WWU Muenster

C-structure on images of completely positive order zero maps*

A completely positive (cp) map is called order zero when it preserves orthogonality. Such maps enjoy a rich structure, which has made them a key component of completely positive approximations of nuclear C*-algebras. Motivated by generalized inductive limits arising from such cp approximations, we consider the structure of the image of a cp order zero map. It turns out that there are a few key properties of a self-adjoint subspace of a C*-algebra that characterize when it is the image of a cp order zero map and, moreover, allow us to build a C*-structure on that subspace. This is joint work with Wilhelm Winter.