CHARLES STARLING, Carleton University
Partial isometric representations of semigroups

In his thesis, Tolich described a class of C*-algebras associated to doubly quasi-lattice ordered groups—these are groups G which have a left- and right-invariant order determined by a subsemigroup P. This generalized work of Raeburn and Hancock on the universal C*-algebra generated by a single power partial isometry (i.e. the case where $G = \mathbb{Z}$ and $P = \mathbb{N}$). We generalize this construction further to the case of LCM semigroups P, construct a suitable boundary quotient, and make the case that these algebras are an appropriate two-sided companion to Cuntz-Li algebras associated to such semigroups.

This is joint work with Ilija Tolich.