JAMES MINGO, Queen's University *Cyclic Groups and R-cyclic operators*

R-cyclic operators are a generalization of R-diagonal operators which are in turn a generalization of Haar unitary operators and circular operators.

In this talk I will present a new connection between cyclic groups and R-cyclic operators. The main result is that the transpose of an R-cyclic operator can be naturally decomposed, with respect to the cyclic group, into freely independent pieces. Thus is joint work with Octavio Arizmendi (Guanajuato).