ADAM SIERAKOWSKI, University of Victoria
The general linear group as a complete invariant for C*-algebras

In 1955 Dye proved that two von Neumann factors not of type I_{2n} are isomorphic (via a linear or a conjugate linear *-isomorphism) if and only if their unitary groups are isomorphic as abstract groups. We consider an analogue for C*-algebras. We show that the topological general linear group is a classifying invariant for simple, unital AH-algebras of slow dimension growth and of real rank zero, and the abstract general linear group is a classifying invariant for unital Kirchberg algebras in UCT. This is join work with Prof Thierry Giordano.