A survey of recent classification results related to representations of nilpotent groups

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The class of C*-algebras generated by irreducible representations of finitely generated nilpotent groups (call this class C) were recently shown to be classifiable by their Elliott invariant. We'll discuss this result in this talk. Then we'll focus on the calculation of the Elliott invariant for all of the faithful irreducible representations of the unitriangular subgroup of $GL(\mathbf{Z}, 4)$. It is not clear how the class C sits inside all of the classifiable C*-algebras, i.e. what the range of the Elliott invariant is when restricted to the class C. We'll discuss a few broad restrictions in this direction. Some of this is joint work with Gillaspy, Kleski and/or McKenney.