GEORGE ELLIOTT, University of Toronto
An abstract characterization of the index of a Fredholm operator

The universal enveloping abelian semigroup of the semigroup of Fredholm operators (on an infinite-dimensional Hilbert space) is the group of integers. A similar statement holds (with a similar proof) for the semigroup of Fredholm elements of the multiplier C^*-algebra of an arbitrary stable C^*-algebra (provided that this is assumed to have an approximate unit consisting of projections—presumably just a technical hypothesis). Of course, the group of integers is replaced by a different group in the general case.

This is joint work with Brian Skinner.