topologically irreducible representations are algebrically irreducible for C^*-algebras

Theorem - Every http://planetmath.org/BanachAlgebraRepresentation topologically irreducible representation of a http://planetmath.org/CAlgebra C^*-algebra is algebraically irreducible.

Remark– It follows easily from the definition that algebraically irreducible of any Banach *-algebra are always topologically irreducible. The above theorem says that for C^*-algebras the converse is also true.