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

 $Canonical\ name \qquad Topologically Irreducible Representations Are Algebrically Irreducible For Calgebra (Canonical) and the proposed for the p$

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 $\label{lem:thm:decomposition} \textbf{Theorem -} Every \ \texttt{http://planetmath.org/BanachAlgebraRepresentation} topologically irreducible representation of a \ \texttt{http://planetmath.org/CAlgebra} C^*-algebra is algebraically irreducible.$

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.