In this talk we show that any finite dimensional irreducible representation of a complex simple Lie algebra of rank \( n \) remains indecomposable if restricted to some abelian subalgebras of the (minimal as it will be explained in the talk) dimension \( n \), extending the corresponding result obtained in [1] (Theorem 3.9) for the simple Lie algebra of type \( A_n \). Such abelian subalgebra \( a \) can be constructed as follows.

Let \( g \) be the complex simple Lie algebra, \( h \subset g \) its Cartan subalgebra and \( \Delta = \Delta(g, h) \) the corresponding set of roots. Further for any \( \alpha \in \Delta \) let \( X_{\alpha} \) be a basis of root space \( g_{\alpha} = \{ X \in g \mid [H, X] = \alpha(H)X \ \forall H \in h \} \), \( \Pi = \{\alpha_1, \ldots, \alpha_n\} \) a set of simple roots in \( \Delta \) and set \( Y_{\alpha_i} = X_{-\alpha_i} \), then \( a \) is the abelian subalgebra of \( g \) spanned by the vectors \( \{Y_{\alpha_2i+1} \mid i = 0, \ldots, \left[ \frac{n}{2} \right] \} \) and \( \{X_{\alpha_2j} \mid j = 1, \ldots, \left[ \frac{n}{2} \right] \} \), where \([x]\) denotes the integer part of \( x \).