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Sub-Exact Sequence on Hilbert Space

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Abstract

The notion of the sub-exact sequence is the generalization of exact sequence in algebra especially on a module. A module over a ring R is a generalization of the notion of vector space over a field F. Refers to a special vector space over field F when we have a complete inner product space , it is called a Hilbert space . A space is complete if every Cauchy sequence converges. Now, we introduce the sub-exact sequence on Hilbert space which can later be useful in statistics. This paper aims to investigate the properties of the sub-exact sequence and their relation to direct summand on Hilbert space . As the result, we get two properties of isometric isomorphism sub-exact sequence on Hilbert space . © Published under licence by IOP Publishing Ltd.

Author keywords
Complete inner product space ; direct summand; Hilbert space ; sub-exact sequence

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