

AN INCLUSION THEOREM FOR MULTIPLIER SEQUENCES

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Abstract: It has been shown that if a sequence of real numbers is a Hermite-multiplier sequence, or a generalized Laguerre multiplier sequence, then it is also a standard multiplier sequence. In this talk we show that the generalized Laguerre multiplier sequences are a proper subset of the Hermite multiplier sequences. The proof is docile, but somewhat technical, although it uses mostly ideas from undergraduate real analysis. We will not assume complete familiarity with multiplier sequences, but the introduction will be brief and fast. We will try to lighten the mood with some examples. All students are welcome to attend!