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LIMITING BEHAVIOR OF WEIGHTED SUMS OF HEAVY-TAILED RANDOM VECTORS AND APPLICATIONS

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Abstract: We present an integral test to determine the limiting behavior of weighted sums of i.i.d. $\mathbb{R}^d$-valued random vectors belonging to the (generalized) domain of operator semistable attraction of some nonnormal law, and deduce a version of Chover's law of the iterated logarithm for them. As applications, the corresponding limit results for some classical summability methods are also established.

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