

# On a metrical theorem of Weyl

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One of the first results in the measure theory of numbers was Weyl's theorem of 1916. If  $a(1), a(2), \dots$  is a strictly increasing sequence of integers, then for almost all  $x$  in the  $d$ -dimensional unit cube, the sequence  $a(1)x, a(2)x, \dots$  is uniformly distributed modulo one. I recall some of the nice results that have been obtained with this as the starting point, including some work of Walter Philipp, and discuss some new results as well. For example, we may ask what happens if  $x$  is confined to a curve (which must not stay for long in any hyperplane). Can we say that almost all points on the curve have this uniform distribution property?