

Fix an integer $r \geq 3$. Given an integer n , we define $M_r(n)$ to be the set of metric spaces with underlying set $\{1, \dots, n\}$ such that the distance between any two points lies in $\{1, \dots, r\}$. We present results describing the approximate structure of these metric spaces when n is large. We then present consequences of these structural results, including an asymptotic enumeration for $M_r(n)$, and in the case when r is even, a first-order labeled 0-1 law. This is joint work with Dhruv Mubayi.