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A short survey of integer tilings

A set $A \subset \mathbb{Z}$ tiles the integers by translations if there is a set $T \subset \mathbb{Z}$ such that every integer $n \in \mathbb{Z}$ has a unique representation $n = a + t$ with $a \in A$ and $t \in T$. The main open question regarding integer tilings is the Coven-Meyerowitz conjecture, providing a tentative characterization of finite tiles. We will survey some of the recent developments and open questions in this area, including a recent joint result with Itay Londner where we prove the Coven-Meyerowitz tiling conditions for a new class of tilings.