

1155-42-397

Rachel Greenfeld* (greenfeld@math.ucla.edu). *Translational Tilings*.

We say that a domain F in some group G *tiles by translations* if it is possible to cover (almost) every point in G exactly once by translates of F . The study of translational tilings is over 100 years old and is still very active nowadays.

Suppose F tiles by translations. What can be said about the structure of the tiling? What can be said about the geometric and analytic properties of F ? We will discuss these questions, and present some recent developments as well as some open problems. (Received January 19, 2020)