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Dynamical generation of graphene

In recent decades, the astonishing physical properties of carbon nanostructures have been discovered and are nowadays intensively studied. We introduce how to obtain a graphene sheet using group theoretical methods and how to construct a graphene layer using the method of dynamical generation of quasicrystals. Both approaches can be formulated in such a way that the points of infinite graphene sheet are generated. Moreover, they provide identical graphene layers. The main objective is to describe how to generate graphene step by step from a single point of the Euclidean plane $\mathbb{R}^2$. Some 2D examples will be shown.