

The main purpose of my talk is to introduce the methods that appeared recently in a series of papers of Jörg Brüdern, Trevor D. Wooley and me.

In additive theory of numbers, we often try to show that “almost all” integers in a certain infinite set can be written in some prescribed form, like the sum of two primes, or the sum of four cubes. The above methods concern this kind of problems generally. For example we may show that almost all cubes can be written as the sum of six cubes.