

TOTALLY SEPARABLE TRANSLATIVE PACKINGS OF A CONVEX BODY

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A packing of translates of a convex body is called *separable* if any two translates can be separated by a hyperplane that does not intersect the interior of any translate of the packing. This notion was introduced by Gábor Fejes Tóth and László Fejes Tóth in 1973, and studied mostly by considering the density of such packings. More recently, Károly Bezdek and others considered the combinatorial properties of the contact graphs of totally separable packings. In a *contact graph* of a packing, we consider the translates to be the vertices, and join two vertices when the two translates touch. Some interesting combinatorial properties of contact graphs are their maximum degree (Hadwiger number), minimum degree, and total number of edges (contact number). We will discuss recent results about these numbers for separable packings in the plane and in higher dimensions.