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The Contact Number Problem in the Plane

Given a packing of n unit disks, we want to maximize the number of touching pairs (the number of contacts) in the packing. In other words, given a set, P , of n points in the plane, with pairwise distance at least one, we want to determine the maximum number of times that two points are of distance one apart in P . In this talk we give a proof of Harborth's Theorem on the maximum contact number in the plane. Additionally, we examine the totally separable version of Harborth's Theorem.