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**Zsolt Langi\*** (zlangi@math.bme.hu), Department of Geometry, Budapest University of Technology, Egry Jozsef u. 1., Budapest, 1111, Hungary. *On the Hadwiger numbers of topological disks.*

The Hadwiger number  $H(S)$  of a topological disk  $S$  in the plane is the maximum number of pairwise nonoverlapping translates of  $S$  that touch  $S$ . It is well known that if  $S$  is convex, then  $H(S) \leq 8$ . A. Bezdek, K. and W. Kuperberg conjectured that the same upper bound holds for the Hadwiger numbers of starlike disks. A. Bezdek showed that  $H(S) \leq 75$  for any starlike disk  $S$ .

Another question of A. Bezdek and Pach was whether there is a universal upper bound for the Hadwiger numbers of topological disks in general. A recent result of Cheong and Lee shows that the answer for this question is no.

In this talk, I present recent results about the Hadwiger numbers of topological disks and, in particular, about those of starlike disks. (Received September 09, 2008)