Cornell University Library

We gratefully acknowledge support from
the Simons Foundation
and member institutions

Mathematics > Combinatorics

Packing anchored rectangles

[Adrian Dumitrescu](), [Csaba D. Tóth]()

(Submitted on 26 Jul 2011 (v1), last revised 30 Jul 2012 (this version, v2))

Let S be a set of n points in the unit square $[0,1]^2$, one of which is the origin. We construct n pairwise interior-disjoint axis-aligned empty rectangles such that the lower left corner of each rectangle is a point in S, and the rectangles jointly cover at least a positive constant area (about 0.09). This is a first step towards the solution of a longstanding conjecture that the rectangles in such a packing can jointly cover an area of at least 1/2.

Comments:	17 pages, 7 figures; updated references
Subjects:	**Combinatorics (math.CO)**; Computational Geometry (cs.CG)
Cite as:	**arXiv:1107.5102** [math.CO]
	(or **arXiv:1107.5102v2** [math.CO] for this version)

Submission history

From: Adrian Dumitrescu [view email]
[v1] Tue, 26 Jul 2011 02:16:11 GMT (321kb,D)
[v2] Mon, 30 Jul 2012 18:21:38 GMT (357kb,D)

Which authors of this paper are endorsers?

Link back to: arXiv, form interface, contact.