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Jesus Jeronimo* (jeronimo@cimat.mx), Callejon Jalisco s/n, Mineral de Valenciana,
Guanajuato, 36000. *Line transversals to translates of unit discs*. Preliminary report.

Let \mathcal{F} be a family of convex figures in the plane. We say that \mathcal{F} has property T if there exist a line intersecting every member of \mathcal{F} . Also, we say that the family \mathcal{F} has property $T(k)$ if every k -membered subfamily of \mathcal{F} has property T .

We have the next problem:

Let C be a centrally symmetric convex figure and let $\mathcal{F} = \{x_i + C\}$ be a finite family of translates of C such that \mathcal{F} has property $T(m)$. What is the smallest positive $\lambda = \lambda(C, m)$ such that, for every \mathcal{F} satisfying the above conditions, the family $\mathcal{F}' = \{x_i + \lambda C\}$ has property T ?

In this talk we will give some results in this direction concerning families of translates of the unit disc. (Received August 08, 2005)