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Alexander Xue and **Pablo Soberón*** (pablo.soberon-bravo@baruch.cuny.edu), One Bernard Baruch Way, Mathematics Department, New York, NY 10010. *Equitable convex partitions of the plane for two families of lines.*

Several extensions of the ham sandwich theorem prove the existence of certain partitions of Euclidean spaces into convex parts. In the plane, such partitions can always divide fairly two finite sets of points at the same time. We extend these results to deal with families of lines instead of families of points. Given two finite families A and B of n lines in the plane each and a positive integer r , we prove the existence of partitions of the plane into r convex parts such that the following holds. For each part C of the partition, there exists a subset of roughly $n^{1/r}$ lines of A whose pairwise intersections all lie in C , and the same holds for B . (Received January 26, 2020)