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Yimin Xiao* (xiao@stt.msu.edu), Department of Statistics and Probability, 619 Red Cedar Road, Michigan State University, East Lansing, MI 48824. *Random Covering Sets and Their Hitting Probabilities.*

Let E be the Dvoretzky random covering sets on the circle. By applying the method of limsup type random fractals in Khoshnevisan, Peres and Xiao (2000), we investigate the probability that E intersects a fixed analytic set G and the Hausdorff dimension of the intersection set $E \cap G$. Extensions to Ahlfors regular metric spaces or higher dimensional torus are also studied. (Received August 18, 2019)