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Hussain Elalaoui-Talibi* (talibi@tuskegee.edu), Department of Mathematics, 70-348 BIOE Building, Tuskegee University, Tuskegee, AL 36088, and **Lisa D. Peterson**. *Convergence in Distribution of Random Compact Sets in Polish Spaces.*

Let $\phi, \phi_1, \phi_2, \dots$ be a sequence of random compact sets on a complete and separable metric space (S, d) . We assume that $P\{\phi_n \cap B = \emptyset\} \rightarrow P\{\phi \cap B = \emptyset\}$ for all B in some suitable class \mathcal{B} and show that this assumption determines if the sequence $\{\phi_n\}$ converges in distribution to ϕ . This is an extension to general Polish spaces of the weak convergence theory for random closed sets on locally compact Polish spaces due to Norberg (1984). (Received September 25, 2006)