

Merging with a Set of Probability Measures*

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Abstract

We provide a characterization of a *set* of probability measures with which a prior “weakly merges.” For that purpose, we introduce the notion of “conditioning rules” which represent *regularities* of probability measures, and we define a probability measure “eventually generated” by a family of conditioning rules. Then, we show that a set of probability measures is learnable, i.e., all probability measures in the set are weakly merged with by a prior, if and only if the set is included in a set of probability measures eventually generated by a *countable* family of conditioning rules. In addition, we argue that our characterization is associated with the impossibility result in Nachbar (1997) and (2005). *Journal of Economic Literature* Classification Numbers: C72, C73, D83.

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