MEASURES AND SUBMEASURES ON BOOLEAN ALGEBRAS

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We give a survey of various results, spanning the last 100 years, dealing with the existence of measures and submeasures on Boolean algebras. We give an algebraic characterization of the following Boolean algebras:

Complete Boolean algebras that carry a σ -additive measure.

Complete Boolean algebras that carry a Maharam submeasure.

Boolean algebras that carry a finitely additive measure.

Boolean algebras that carry an exhaustive submeasure.

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