

Pap, Endre

The Vitali-Hahn-Saks theorems for k-triangular set functions. (English) Zbl 0626.28001

Atti Semin. Mat. Fis. Univ. Modena 35, 21-31 (1987).

For an algebra \mathcal{A} of sets and $k \in (0, \infty)$, a set function $\mu : \mathcal{A} \rightarrow \mathbb{R}_+$ is said to be k -triangular if $|\mu(A \cup B) - \mu(A)| \leq k\mu(B)$ holds for each pair of disjoint sets $A, B \in \mathcal{A}$. The author proves variants of the Vitali-Hahn-Saks (or Brooks-Jewett) Theorem for exhaustive k -triangular set functions on an algebra having the subsequential interpolation property and for k -triangular set functions of regular variation on the Borel subsets of a Hausdorff locally compact topological space. The paper contains numerous references on the subject; two preprints quoted by the author are now published: *P. de Lucia* and *P. Morales* [*Ric. Mat.* 35, 75-87 (1986; [Zbl 0612.28006](#))] and *H. Weber* [*Rocky Mt. J. Math.* 16, 253- 275 (1986; [Zbl 0604.28006](#))].

Reviewer: [Klaus D.Schmidt](#)

MSC:

[28A10](#) Real- or complex-valued set functions

[28A33](#) Spaces of measures, convergence of measures

[28C15](#) Set functions and measures on topological spaces (regularity of measures, etc.)

[28B10](#) Group- or semigroup-valued set functions, measures and integrals

Cited in 7 Documents

Keywords:

[Vitali-Hahn-Saks theorem](#); [Brooks-Jewett theorem](#); [exhaustive k-triangular set functions](#)