Strictly Non Zero Group Valued Charges

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Abstract

A charge (finitely additive measure) defined on a Boolean Algebra taking values in a commutative group G is called a strictly non zero (SNZ) charge if it takes the identity value in G only for the zero element of the Boolean algebra. A study of such charges was initiated in 2002 by Rüdiger Göbel and K.P.S. Bhaskara Rao. We present an overview of SNZ group valued charges and propose several challenging problems. We also answer the problem of existence of a Z-valued SNZ charge on the Boolean algebra of clopen subsets of 2^Y in the affirmative.