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Indlekofer, Karl-Heinz (D-PDRB); **Fehér, János** (H-PECS); **Stachó, László L.** (H-SZEG-B)

On sets of uniqueness for completely additive arithmetic functions. (English summary)

Analysis **16** (1996), *no. 4,* 405–415.

Let $q>1$ be an integer. The authors define the mod_q uniqueness sets with respect to the class of completely additive functions: $A\subseteq\mathbf{N}$ is a set of mod_q-uniqueness if for each completely additive f taking integer values, $f(a)\equiv 0 \bmod q$ for every $a\in A$ implies that $f(n)\equiv 0 \bmod q$ for every $n\in\mathbf{N}$. They prove (Theorem 1) that A is a set of mod_q-uniqueness if every $n\in\mathbf{N}$ can be written as $n=L^q\prod_{j=1}^s a_j^{r_j}$, where L is a positive rational number, $a_j\in A$ $(j=1,\cdots,s)$ and $r_j\in\{0,1,\cdots,q-1\}$ $(j=1,\cdots,s)$.

Reviewed by *I. Kátai*