

Prime Factors of Infinite Incongruent Exact Covers

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An infinite incongruent exact cover, or IIEC, is a covering of $\mathbb{N} = \{0, 1, 2, \dots\}$ by disjoint arithmetic sequences with distinct moduli. In [1], Beebe presents a construction of an infinity of IIECs, and asks whether others exist. In this paper I prove a strong restriction on the sets of moduli that can occur in an IIEC.