

## **Odd Coverings of Subsets of the Integers**

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Let  $S$  be a set of integers. A covering system of  $S$  is a finite collection of congruences such that every integer in the set satisfies at least one of the congruences in the collection. An odd covering of  $S$  is a covering system such that all moduli are distinct, odd, and greater than one. Filaseta and Harvey recently investigated the existence of odd coverings of certain subsets of the integers. This talk will extend this investigation and address a question of Filaseta and Harvey.

Keywords: covering systems, odd covering, minimum modulus problem