A PROBLEM OF INTEGER PARTITIONS AND NUMERICAL SEMIGROUPS

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Let C be a set of positive integers. In this talk we obtain an algorithm for computing all subsets A of positive integers which are minimals with the condition that if $x_1 + \cdots + x_n$ is a partition of an element in C, then at least a summand of this partition belongs to A. We use techniques of numerical semigroups to solve this problem, because it is equivalent to give an algorithm that allows us compute all the numerical semigroups which are maximals with the condition that have empty intersection with the set C.

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