

Bilkent University
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## Problem Of The Month

Term: April 2016

Let $A_{1}, A_{2}, \ldots, A_{k}$ be distinct subsets of $\{1,2, \ldots, 2016\}$ such that for each $1 \leq i<j \leq k$ the intersection $A_{i} \cap A_{j}$ forms an arithmetic progression. Find the maximal value of $k$.

