

Bilkent University
Department of Mathematics

## Problem Of The Month

Term: December 2013

33 boxes are placed around a round table. Alice distributes 333 beads into some of these boxes and after that Bob marks one of the boxes. Determine the maximal possible value of $k$ such that no matter how Bob marks a box Alice can choose 16 unmarked non-neighbouring boxes containing at least $k$ beans in total.

