Response to Referee's comment
Jean Fromentin and Florent Hivert
April 10, 2014

We thank the two referees for their useful remarks and comments. According to referee's suggestion, we corrected typos and minor errors.

The followings are a list of response to the other refree's comments

1. REPORT 1C

- We didn't compute new values of the n_g's but at the end of the last section we have added references for possible further improvement, both on the n_g's and on the verfication of Wilf's conjecture.
- Following referee's suggestion, we removed the sentence "The values of n_{53} and n_{54}...".
- The referee thinks a "h" is missing in "anded". The word "anded" is correct and is connected to the bit operator "and" in computer science. We have remplaced it by "and-ed" for clarity.
- We have kept the comparision of the depth and breadth first search algorithm, but we have added a comment precising that both algorithms are based on the same naive representation of numerical semigroups.
- Following referee's suggestion, we have updated the GAP reference in bibliography.

2. REPORT 1M

- As explained by the referee, the paragraph about the computation of the Apéry set of the son is unfortunate. We have removed it.
- The referee says that our representation is not completely new and has been used by people concerned with coding theory. Indeed the sequence $\{v_i\}_{i \in \mathbb{N}}$ is relatively similar to the one we use but seems to be different. We have then removed the word "new" when we talk about our representation. We have also added a sentence, with a reference to [M. Bràs-Amorrós, Addition behavior of a numerical semigroup], after the description of our representation.
- Following referee's suggestion, we defined the Frobenius number $f(S) = \max(\mathbb{Z} \setminus S)$ and replaced each instance of $c(S) - 1$ by $f(S)$.
- Following referee's suggestion, we have removed or simplified some proofs.
- Following referee's suggestion, we have removed the last sentence of the first paragraph of section 3 and discuss the advantage of a depth first search exploration in terms of memory consumption.
- About point (12) of referee report we had an explanation for why the Wilf's conjecture is only tested for $g \leq 60$ and not $g \leq 67$.