

## NUMBER THEORY SESSION

## INFINITE DESCENDANT NODES IN A NUMERICAL SEMIGROUP TREE.

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## Abstract.

Motivated by studying the growth of the sequence  $n_g$  that counts the number of numerical semigroups of genus g, in this talk we will see how to organize such semigroups in a tree so that at each level g of the tree there are numerical semigroups of genus g. In this tree - which seems to only grow but the proof of this is an open problem - we will characterize the nodes with infinite descendants, which appear to be rare but support the tree.

**Keywords:** numerical semigroup, semigroup tree, infinite chains.

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