BOUNDEDNESS OF THE TYPE OF SOME CLASSES OF NUMERICAL SEMIGROUPS

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The type of a numerical semigroup Γ is defined as the number of gaps $g \notin \Gamma$ such that $g + s \in \Gamma$ for every $s \in \Gamma$. This invariant is equal to the Cohen-Macaulay type of the associated semigroup ring (or equivalently, its last Betti number).

In this talk, we provide new results on the boundedness of the type of a nearly Gorenstein - and specifically, almost symmetric - numerical semigroup. Furthermore, we discuss the relation between this problem and the boundedness of the cardinality of minimal presentations of symmetric, almost symmetric and nearly Gorenstein numerical semigroups (or equivalently, the number of generators of the defining ideal of their semigroup ring).