Almost symmetric generalized numerical semigroups

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Abstract

In this talk, we discuss the outcomes of an extension of the notion of almost-symmetry for a special class of affine semigroups in higher dimensions, the so-called generalized numerical semigroups. By exploring some symmetries occurring in these objects, we present the main characterizations of this concept. We show that this property yields a new family of Frobenius generalized numerical semigroups that extends the class of irreducible generalized numerical semigroups. Furthermore, we discuss a method of computing all almost symmetric generalized numerical semigroup having a fixed Frobenius element and organizing them in a rooted tree.

Joint work with Carmelo Cisto.

References

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