



SPECIAL SUBDIAGRAMS OF YOUNG DIAGRAMS

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ABSTRACT

In this talk, we will introduce special subdiagrams of a Young diagram. The concept of subdiagrams is defined using partitions which is an analytic definition although they are geometric objects. We will define special subdiagrams of a given Young diagram in a geometric way rather than the original definition of subdiagrams. This definition gives us a sequence of subdiagrams. Then using the bijective correspondence between the set of all numerical sets and the set of all Young diagrams, we will characterize the numerical sets corresponding to special subdiagrams and we will provide conditions when they are numerical semigroups. If the time allows, we will also discuss the special subdiagrams of some classes of numerical semigroups.

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Keywords Young diagrams, subdiagrams, special subdiagrams, numerical sets, numerical semigroups.

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