

## Seminar Announcement

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# Maximal (Abelian) Repetitions in Strings

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Thursday 3rd November 2016, 3 p.m.

Room 5, Via Archirafi 34, 90123 Palermo

Finding repetitions in strings is a fundamental task in many applications, e.g. data compression and analysis, bioinformatics, etc. Since any repetition is contained in a maximal one, one can limit the search to maximal repetitions, also called runs.

Recently, a 15 year-old conjecture stating that the maximum number of runs in a string of length  $n$  is less than  $n$  has been positively solved. We illustrate the ideas at the basis of the solution, as well as recent developments.

Abelian repetitions in strings have been considered since a paper by Erdős of 1961. We introduce the notion of a maximal abelian repetition (abelian run) and efficient algorithms to locate abelian runs in a string.

For further information:

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