

Words
and
Automata
Research
Group

Seminar Announcement

Decompositions of the Fibonacci word

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Thursday 15th January 2015, 3 p.m. Room 7, Via Archirafi 34, 90123 Palermo

The Fibonacci word 010010100100101... is a binary sequence in which the two symbols alternate following the well known rules of the Fibonacci sequence 1, 1, 2, 3, 5, 8, ...

In this talk we will analyze several decompositions of the Fibonacci word in finite blocks, also related to the Fibonacci sequence. Each of these decompositions can be viewed as a rule for constructing the Fibonacci word, and highlights particular combinatorial properties, sometimes geometric, sometimes arithmetic, or related to the descriptional or algorithmic complexity.

We will show that most of the decompositions known in literature can indeed be derived one from each other starting from a simple property of Fibonacci numbers. We will also introduce new decompositions.

For further information:

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