



UNIVERSITÀ  
DEGLI STUDI  
DI PALERMO

Dipartimento di Matematica e Informatica

Words  
and  
Automata  
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Group

## Seminar Announcement

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### Construction of a class of decidable two-dimensional codes

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Friday 23rd May 2014, 11:30 a.m.

Room 7, Via Archirafi 34, 90123 Palermo

A two-dimensional code is defined as a set  $X$  of pictures such that any picture over the alphabet is tilable in at most one way with pictures in  $X$ . It is in general undecidable whether a set  $X$  of pictures is a code also in the finite case. Very recently, strong prefix picture codes were defined as a decidable subclass that generalizes prefix string codes.

No examples of infinite codes were proposed. Here are presented effective constructions to get strong prefix codes both in the finite and infinite case. As application it is proved that the linearization of any finite strong prefix picture code is a string set that is commutatively equivalent to a prefix string code.

For further information:

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*All interested people, in particular students, are invited to participate*