

1103-05-32

**Christophe Reutenauer\*** ([reutenauer.christophe@uqam.ca](mailto:reutenauer.christophe@uqam.ca)). *Study of finite Sturmian words*. Preliminary report.

It is known that for a given natural number  $n$  and for a given Sturmian sequence  $s$ , the set of words of length  $n$  that appear as factor of this sequence has cardinality  $n + 1$  (Morse and Hedlund 1941). Consider all possible such sets, for fixed  $n$  and any Sturmian sequence  $s$ . The number of such sets is  $\phi(1) + \dots + \phi(n)$  (Richomme and Séébold 2011). We give a classification in two classes of these sets, characterized by conjugation and periodicity properties. (Received July 31, 2014)