

SALZBURG MATHEMATICS COLLOQUIUM

Winter 2014/2015

Yann Bugeaud (Strasbourg)

„On the continued fraction expansion of algebraic numbers“

January 29, 2015

Abstract:

We survey recent results on the continued fraction expansion of algebraic numbers of degree at least three. We show that, if the sequence of partial quotients of a real number enjoys suitable combinatorial properties, then this number must be transcendental. As a consequence, the infinite word composed of the partial quotients of an algebraic number of degree at least three cannot have sublinear block complexity and it cannot be generated by a finite automaton. For more information see the extended abstract at the web page mentioned below.

Thursday, **15:15-16:00**
Seminarraum II, 1. Stock