UNIVERSITÄT SALZBURG

SALZBURG MATHEMATICS COLLOQUIUM
Summer 2016

Jan-Hendrik Evertse (Leiden)

„Results and open problems related to Schmidt's Subspace Theorem"

April 7, 2016

Abstract:

In 1955, Roth proved an optimal result on the approximation of algebraic numbers by rationals, which can be stated as follows. Let a be a real algebraic number. Then for every d>0 there are only finitely many rational numbers x/y with coprime integers x,y and $y>0$ such that $|a-x/y|<y^{-2-d}$. In the late 1960-s and early 1970-s, W. Schmidt vastly generalized this, culminating in his famous Subspace Theorem, which is now a very powerful tool in Diophantine approximation. I will give an overview of the state of the art of the Subspace Theorem and if time permits, discuss a conjectural improvement and some of its consequences.

Thursday, **15:00-15:45**
Hörsaal 414, 1. Stock