





## Institut f. Analysis und Zahlentheorie

## Zahlentheoretisches Kolloquium

Donnerstag, 22. 3. 2018, 12:00

Seminarraum Analysis-Zahlentheorie (NT02008), Kopernikusgasse 24/II

## Elliptic curves and rational sequences

## Márton Szikszai

(University of Debrecen, dzt. TU Graz)

Abstract: In this talk, we explore the connection between the ranks of elliptic curves and the length of certain rational sequences contained in the coordinates of rational points. The structure of the presentation is the following. First, we give a lazy survey of rank records and the methods used in obtaining them, especially the algebraic approach of Mestre. In the middle part, we talk about the past and recent progress in the construction of elliptic curves admitting long arithmetic and geometric progressions. Finally, we present some related new results as part of my research project at TU Graz.

R.Tichy