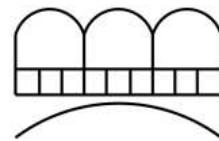


Graduiertenkolleg

# Experimentelle und konstruktive Algebra

RWTH AACHEN  
UNIVERSITY

Experimental and  
constructive  
algebra



## Kolloquiumsvortrag

Dienstag, 29. November 2011, 15:45 Uhr, Hörsaal III

**MÉLANIE RACZEK** (Université Catholique de Louvain, Belgien):  
***Milnor K-groups of  $F(t)$  and ramification sequences***

For  $F$  a field and  $t$  an indeterminate, we study the second Milnor  $K$ -group  $K_2F(t)$  of the rational function field  $F(t)$ . We define the *Faddeev length* of a  $\xi \in K_2F(t)$  as the least number of symbols  $\sigma_1, \dots, \sigma_r$  such that  $\xi - (\sigma_1 + \dots + \sigma_r)$  is in the image of the map  $K_2F \rightarrow K_2F(t)$ . It is a measure of complexity of the elements of  $K_2F(t)$  and it is related to the Faddeev index of central simple algebras. We give an upper bound for the Faddeev length of  $\xi$  in terms of the degree of its ramification sequence.

Wir laden alle Interessierten herzlich ein.

Ab 15:00 Uhr gibt es Kaffee und Tee in der Bibliothek des Lehrstuhl D für Mathematik.