



# Oberseminar zur Algebra und Algebraischen Kombinatorik

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(Universität Hamburg)

## "Automorphisms of Root Systems and Quantum groups"

I will review the definition of a root system for a semisimple Lie algebra and consider an action of (suitable) automorphisms. Then, roughly, the orbits of the roots form a new root system. As examples, I will discuss folding of Dynkin diagrams such as  $E_6 \rightarrow F_4$  as well as so-called Satake diagrams. Then I will review the (a-priori unrelated) idea of Schur covering groups. Finally I will briefly present own results, where these tools have been combined to construct extensions of quantum groups.

**Montag, 30.06.2014**  
**ab 16:00 Uhr, Raum a410**  
Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

gez. Prof. Dr. C. Bessenrodt, Prof. Dr. M. Cuntz, Prof. Dr. U. Derenthal

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