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Leibniz  
Universität  
Hannover

# Oberseminar zur Algebra und Algebraischen Kombinatorik

**Dr. Bea Schumann**  
(Universität zu Köln)

## „Combinatorics of canonical bases revisited“

Via combinatorial objects called Rhombic tilings we discover a duality between two classical parametrizations of canonical bases of the positive part of the quantized enveloping algebra of  $sl(n, \mathbb{C})$ , Lusztig's parametrization and the string parametrization. We show that the defining inequalities of the cone of one parametrization is controlled by the combinatorics of the other. We recover this duality in a mirror symmetry construction for cluster varieties by Gross-Hacking-Keel-Kontsevich.

**Montag, 05.12.2016**  
**ab 14:00 Uhr, Raum a410**  
Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

Institut für Algebra, Zahlentheorie  
und Diskrete Mathematik