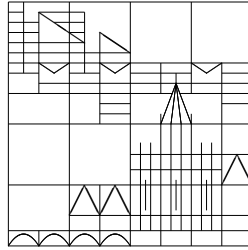


**Universität Konstanz**

**Fachbereich  
Mathematik und Statistik**



Konstanz, den 3. Januar 2017

Im Zuge der Präsentation wesentliche Ergebnisse seiner Dissertation  
wird am  
Dienstag, dem 10. Januar 2017,  
folgender Vortrag gehalten:

**Tareq Hamadneh (Universität Konstanz):**

*„Bounding Polynomials and Rational Functions in the Tensorial and  
Simplicial Rational Bernstein Forms“*

**Zeit: 17:00 Uhr**

**Raum: F 426**

Interessenten sind herzlich willkommen!

**Abstract:**

In this talk we present bounds for the range of polynomials and rational functions over boxes and simplices of  $R^n$  which are provided by the Bernstein expansion. Specifically, we address the following topics:

- Sharpness, monotonicity and inclusion isotonicity of the bounds,
- convergence properties of the bounds,
- minimization and certificates of positivity,
- lower functions based on least squares for polynomials and rational functions.