

Einladung

Im Rahmen des Allgemeinen Kolloquiums hält

Herr Prof. Dr. Jan Draisma
(Universität Bern)

am **Donnerstag, dem 10. November 2016**, einen Vortrag zum Thema:

Orthogonal tensor decomposition from an algebraic perspective

Der Vortrag findet um **17.00 Uhr** in Raum **F 426** statt.

Es wird Gelegenheit gegeben, sich vorher (ab 16.30 Uhr)
im Commoncenter F 441 bei Tee und Kaffee zu treffen.

Alle Interessenten sind herzlich eingeladen.

Andrea Barjasic
Beauftragte für das Kolloquium

Abstract:

Every real or complex matrix admits a singular value decomposition, in which the terms are pairwise orthogonal in a strong sense. Higher-order tensors typically do not admit such an orthogonal decomposition. Those that do have attracted attention from theoretical computer science and scientific computing. Complementing this existing literature, I will present an algebro-geometric analysis of the set of orthogonally decomposable tensors. This analysis features a surprising connection between orthogonally decomposable tensors and semisimple algebras—associative in the case of ordinary or symmetric tensors, and of compact Lie type in the case of alternating tensors.

(Joint work with Ada Boralevi, Emil Horobet, and Elina Robeva.)