

29/05/2026

InterCity - seminar

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**BERN - Konstanz - Lugano -  
Neuchâtel**

Time	Speaker	Talk
12:30	Anaëlle Pfister (MPI-MIS Leipzig)	<b>Positive Geometries for Hyperplane and Toric Arrangements</b>  Positive geometry is a new mathematical topic inspired by observations of geometric structures in particle physics and cosmology. Motivated by the examples of the moduli space of smooth marked curves of genus 0 and of Del Pezzo surfaces, I will explain how hyperplanes and toric arrangements arise as positive geometries.
13:45	Matěj Doležálek (Konstanz)	<b>Nonlinear flattenings of tensors</b>  Flattenings, or maps which assign matrices to tensors, are a common source of lower bounds on tensor border rank. However, known flattening methods have long been subject to severe barriers, namely being unable to distinguish secant varieties from cactus varieties and only proving border ranks up to roughly $2n$ on tensors of shape $n \times n \times n$ . In this talk, I will show how using nonlinear flattenings broke the cactus barrier and how we hope to overcome the $2n$ barrier. Based on ongoing joint work with Mateusz Michałek and Colin Stastny.

Venue: Sidlerstrasse 5, room 228, Bern

For further informations please refer to the seminar's webpage

[www.math-unibe.ch/intercity-seminar](http://www.math-unibe.ch/intercity-seminar)

or contact the organisers:

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