07/10/2026

InterCity - seminar

BERN - Konstanz - Lugano - Neuchâtel

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Time	Speaker	Talk
12:30-13:30	Claudia Stadlmayer (Neuchâtel)	**G-smoothness, singularities and del Pezzo surfaces**
		If f: X → Y is a quotient by a free action of a finite group G, then X is smooth if and only if Y is smooth. Working in characteristic p>0, one can replace G by a finite, not necessarily reduced group scheme, and then X might be singular even if Y is smooth - a phenomenon that does not occur in characteristic zero. More generally, a variety X with an action of a group scheme G is called G-smooth if the quotient stack [X/G] is smooth. Introduced by M. Brion, this notion provides a substitute for ordinary smoothness in the study of equivariant desingularization in positive characteristic, where group scheme actions need not lift to a resolution of singularities. Starting from concrete examples of singularities, group schemes and del Pezzo surfaces, I will report on local criteria for G-smoothness as well as the global classification of G-smooth del Pezzo surfaces with canonical singularities. This is work in progress with DongSeon Hwang and Gebhard Martin.
14:00-15:00	Maciej Gałązka (Konstanz)	**Adventures with AI - attempts to calculate the border cactus rank of monomials**
		We know the Waring rank and cactus rank of monomials, but we don't know their border counterparts. In this talk, I will discuss the prompts that I gave to chat-gpt to calculate the border cactus rank, the answers, and what I learned from them.

Venue: Sidlerstrasse 5, room 228, Bern

For further informations please refer to the seminar's webpage

`www.math-unibe.ch/intercity-seminar`

or contact the organisers:

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