

03/05/2019

InterCity - seminar

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Bern - Fribourg/Freiburg -
Neuchâtel

Time	Speaker	Talk
14:00	Jérémy Blanc (Basel)	Quotients of groups of birational transformations Abstract: Given some algebraic variety, one can study its group of birational transformations. The simplest varieties being the rational ones, give the group of automorphisms of a free field extension in n variables (Cremona group). I will explain when the obtained group is simple (as an abstract group), and when it is not, what are the possible quotients.
15:30	Emanuele Delucchi (Fribourg)	Stanley-Reisner rings of symmetric simplicial complexes Abstract: A classical theme in algebraic combinatorics is the study of face rings of finite simplicial complexes (named after Stanley and Reisner, two of the pioneers of this field). In this talk I will examine the case where the simplicial complexes at hand carry a group action and are allowed to be infinite. I will present the foundations of this generalized theory with a special focus on simplicial complexes associated to (semi)matroids, where the associated rings enjoy especially nice algebraic properties. A main motivation for our work comes from the theory of arrangements in abelian Lie groups (e.g., toric and elliptic arrangements), and in particular from the quest of understanding numerical properties of the coefficients of characteristic polynomials and h -polynomials of arithmetic matroids. I will describe our current results in this direction and, time permitting, I will outline some open questions that arise in this new framework. (Joint work with Alessio D'Alì.)

The talks will take place in Room B217 of the UniMail Building at Rue Emile-Argand 11 in Neuchâtel.

For further informations please contact the organisers:

Emanuele Delucchi (Fribourg) — Jan Draisma (Bern) — Elisa Gorla (Neuchâtel)