

29/03/2019

InterCity - seminar

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Bern - Neuchâtel -  
Fribourg/Freiburg

Time	Speaker	Talk
14:00	Sara Lamboglia (Frankfurt)	<b>Computing toric degenerations of flag varieties</b>  <b>Abstract:</b> Toric degenerations of flag varieties have been studied quite intensively in the last few decades and several methods have been applied. In this talk I'm going to show results on the toric degenerations arising from the tropicalization of the full flag varieties of $C^4$ and $C^5$ . These are obtained as Gröbner degenerations associated to the initial ideals corresponding to the maximal cones of the tropicalization of the flag variety. I will then compare these degenerations with the ones arising in representation theory from string polytopes and FFLV polytopes. Moreover I will present a general procedure to find toric degenerations in the cases where the initial ideal arising from a cone of the tropicalization of a variety is not prime. This is a joint work with L. Bossinger, K. Mincheva and Fatemeh Moammadi.
15:30	Elisa Gorla (Neuchâtel)	<b>Universal Groebner bases and Cartwright-Sturmfels ideals</b>  <b>Abstract:</b> Universal Groebner bases are systems of generators of ideals, which are a Groebner basis with respect to any term order. In this talk, I will introduce a family of ideals named after Cartwright and Sturmfels and defined in terms of properties of their multigraded generic initial ideals. These ideals possess the remarkable property that all their initial ideals are radical. Moreover, the family of Cartwright-Sturmfels ideals is closed under several natural operations, including elimination and taking linear sections. Their natural "dual" family also possesses remarkable properties, including the fact that every (multigraded) minimal system of generators is a universal Groebner basis. A connection to universal Groebner bases for determinantal ideals will be discussed.

The talks will take place in Room 2.73 of the Physics building (PER 08) at the university of Fribourg.

For further informations please contact the organisers:

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