

Mathematisches Institut, Sidlerstrasse 5, CH-3012 Bern

b UNIVERSITÄT BERN

Philosophischnaturwissenschaftliche Fakultät Departement Mathematik und Statistik **Mathematisches Institut**

Mathematical Colloquia

Monday, 28 February 2022

17:15 h, lecture room B6 (ExWi)

Prof. Dr. Mateusz Michalek, University of Konstanz

Enumerative problems in statistics, combinatorics and topology

Abstract: Algebraic geometry has made great advances in the last two centuries. A particular role was played by enumerative geometry, where the correct setting of moduli spaces found applications beyond mathematics. In my talk I would like to present new work on applications of enumerative geometry providing a unified approach to fundamental invariants in algebraic statistics, combinatorics and topology. Achieving our results would not be possible without the fundamental work of De Concini, Huh, Laksov, Lascoux, Pragacz, Procesi and Sturmfels. The talk is based on joint works with Conner, Dinu, Manivel, Monin, Seynnaeve, Vodicka and Wisniewski.

CORONAVIRUS SAFETY MEASURES:

For family reasons, the speaker would prefer if the audience wears a mask during his colloquium talk. Please consider bringing and wearing a mask.