



universität
wien

Fakultät für Mathematik

ANTRITTSVORLESUNG

Mathematisches Kolloquium

Mittwoch, 10. November 2021

Sky Lounge

EINLADUNG

Vera Vértesi

(Universität Wien)

„How to untangle plane curves — How contact topology proves classical theorems“

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Abstract:

The Whitney-Graustein Theorem states that two plane curves can be smoothly deformed into each other if and only if they have the same winding number.

The original proof of Whitney from 1937 is one of the first occurrences of Gromov's h-principle, and it is semi-algorithmic. In this talk, after setting up the scene, I will give an algorithmic proof for this theorem that uses contact topology. The talk gives a gentle introduction into the field of contact topology with an emphasis on Legendrian knots, and it should be accessible even for students.

15.45 Uhr: Kaffeejause

16.15 Uhr: Vortrag

Kleines Buffet im Anschluss

Radu Ioan Bot