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## Oberseminar Institut für Algebraische Geometrie

## Daniel Litt

(University of Georgia)

## The tropical section conjecture.

Grothendieck's section conjecture predicts that for a curve X of genus at least 2 over an arithmetically interesting field (say, a number field or p-adic field), the étale fundamental group of X encodes all the information about rational points on X. In this talk I will formulate a tropical analogue of the section conjecture and explain how to use methods from low-dimensional topology and moduli theory to prove many cases of it. As a byproduct, I'll construct many examples of curves for which the section conjecture is true, in interesting ways. For example, I will explain how to prove the section conjecture for the generic curve, and for the generic curve with a rational divisor class, as well as how to construct curves over p-adic fields which satisfy the section conjecture for geometric reasons. This is joint work with Wanlin Li, Nick Salter, and Padma Srinivasan.

Donnerstag, 03.06.2021 16:30 - 17:30 Leibniz Universität Hannover Alle Interessierten sind herzlich eingeladen.