



Du
16
MARS.
2016

16h00
-
17h00

RÉGA

Martin Ulirsch "The moduli stack of tropical curves"

IHP
Salle 314

INSCRIPTION

Martin Ulirsch (Bonn)
The moduli stack of tropical curves

The moduli space of tropical curves (and its variants) are some of the most-studied objects in tropical geometry. So far this moduli space has only been considered as an essentially set-theoretic coarse moduli space (sometimes with additional structure). As a consequence of this restriction, the tropical forgetful map does not define a universal curve (at least in the positive genus case). The classical work of Knudsen has resolved a similar issue for the algebraic moduli space of curves by considering the fine moduli stacks instead of the coarse moduli spaces.

In this talk I am going to give an introduction to these fascinating moduli spaces and report on ongoing work with Renzo Cavalieri, Melody Chan, and Jonathan Wise, where we propose the notion of a moduli stack of tropical curves as a geometric stack over the category of rational polyhedral cones. Using this framework one can give a natural interpretation of the forgetful morphism as a universal curve. The coarse moduli space arises as the set of $\mathbb{R}_{\geq 0}$ -valued points of the moduli stack. Given time, I will also explain how the process of tropicalization for these moduli stacks can be phrased in a more fundamental way using the language of logarithmic algebraic stacks.

URL of the page: <https://www.ihp.fr/fr/agenda/martin-ulirsch-moduli-stack-tropical-curves>



INSTITUT HENRI POINCARÉ - UAR839

Sorbonne Université / CNRS
11 rue Pierre et Marie Curie
75231 Paris Cedex 05

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- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
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