

Announcement

## Oberseminar Geometrie

at **2:15pm CEST/CES**

Zoom

<https://uni-wuerzburg.zoom.us/j/96587647828?pwd=ZjliUHpkd3J2cDlpVFBYRmlrYkRMZz09>

FRANCESCO CATTAFI (WÜRZBURG)

Filtered Lie groupoids and subriemannian contact structures

This talk is an informal report on a work in progress with Andreas Čap. In the first part I will explain how a geometric structure on a principal bundle can be encoded on the transitive Lie groupoid associated to the principal bundle, and discuss how to extend this correspondence to the filtered version of these objects. However, in order to treat interesting examples of structures with more than one local model, one has to give up on transitivity and provide a different description of the classical prolongation construction. In the second part I will provide an overview on these problems, focussing on the case of subriemannian contact structures.

Invited by Madeleine Jotz Lean