

Announcement

Julius-Maximilians-UNIVERSITÄT

WÜRZBURG

## Seminar on Deformation Quantization

## 30.6.2023 at 2pm CEST

Seminarroom SE 30

## Alfonso Garmendia (Universitat Politècnica de Catalunya)

## PB groupoids and bundle gerbes

A Lie 2-group is a groupoid on the category of Lie groups just like Lie groupoids are groupoids in the category of manifolds. To expand this logic, we get PB-groupoids as groupoids in the category of principal bundles, this is, a Lie groupoid with a free and proper action of a Lie 2-group (free and properness implies that the quotient space is still a Lie groupoid). On another context, bundles gerbes are well-studied objects, and are also described as a quotient of a Lie groupoids. In this talk we will introduce more slowly all these objects and prove that see that bundles gerbes sit inside PB-groupoids.

Invited by Stefan Waldmann