

Announcement

Seminar on Deformation Quantization

26. 3. 2021 at 2 pm CET

<https://uni-wuerzburg.zoom.us/j/92529190594?pwd=WkJvR1o1QUdldUNSSjFJbHB4c0Z0dz09>

MADELEINE JOTZ LEAN (UNIV. GÖTTINGEN)

Transitive double Lie algebroids via core diagrams

This talk begins by explaining Brown and Mackenzie's equivalence of locally trivial double groupoids with locally trivial core diagrams (of groupoids). Then it establishes an equivalence between the category of transitive double Lie algebroids and the category of transitive core diagrams (of Lie algebroids). The construction of this equivalence uses the comma double Lie algebroid of a morphism of Lie algebroids, which is introduced as well. The proofs of the results in this talk rely heavily on Gracia-Saz and Mehta's equivalence of decomposed VB-algebroids with super-representations, and they showcase the power of this recent tool in the study of VB-algebroids. Since core diagrams of (integrable) Lie algebroids integrate to core diagrams of Lie groupoids, the equivalences above yields a simple method for integrating transitive double Lie algebroids to transitive double Lie groupoids. This is joint work with Kirill Mackenzie, who sadly passed in 2020.

Invited by Stefan Waldmann