Announcement

Seminar on Deformation Quantization and Geometry

November 17th 2023 at 14:00 s.t.

Seminarroom SE 30

Antonio Maglio (Università degli Studi di Salerno)

Shifted contact structures on differentiable stacks

We propose a definition of +1-shifted contact structure on a differentiable stack, thus laying the foundations of +1-shifted contact geometry. As a side result, we will show that the kernel of a multiplicative 1-form on a Lie groupoid (might not exist as a vector bundle of Lie groupoids but) it always exists as a vector bundle of differentiable stacks and it carries a stacky version of the curvature of a distribution. Prequantum bundles over +1-shifted symplectic groupoids provide examples of +1-shifted contact structures. Time permitting, we will discuss 0-shifted contact structures which are, in some aspects, surprisingly more complicated than +1-shifted ones. This is joint work with A. G. Tortorella and L. Vitagliano.

Invited by Francesco Cattafi, Madeleine Jotz