Announcement

# Seminar on Deformation Quantization and Geometry

**14. 6. 2024 at 14:00 s.t.**

Seminarroom 31.00.018

## Dominik Gutwein (HU Berlin)

## Calibrated submanifolds in Joyce manifolds

Calibrated submanifolds are a special class of volume-minimising submanifolds and are widely studied in differential geometry and geometric analysis. They naturally arise in manifolds with special holonomy and are sometimes viewed as their natural subobjects. This talk begins with an introduction to this topic. We will then focus on one particular class of calibrated submanifolds that appears in $G_2$-geometry. In particular, we will describe a construction method that produces new examples of such submanifolds inside $G_2$-manifolds discovered by Joyce.

Invited by Madeleine Jotz