Symmetric spaces and quantization

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Oct 4, 2023 16:00-17:00h on campus in M.G.004 Analysis & Geometry Seminar, Antwerpen

I will review part of my work on the use of symmetric spaces techniques in different aspects of quantization theory. Especially, I will focus on a solution of a conjecture by Alan Weinstein (1994) concerning the semiclassical analysis of invariant star products on Hermitean symmetric spaces. Alan Weinstein's question led me to investigating non-formal deformation quantization and applications in Connes' approach to noncommutative geometry. I will present some results in that direction as well such as noncommutative Riemann surfaces and applications to modular forms.