

Geometric quantization of Poisson homogeneous spaces

Nicola Ciccoli

Starting from recent results concerning the symplectic integration of Poisson homogeneous spaces, we will show how some geometric quantization techniques, adapted to symplectic groupoids, allow to recover some of the features of quantum homogeneous spaces. In particular we will show how the structure of groupoid C^* -algebra highlighted by Sheu can be interpreted as a (sort of) Bohr-Sommerfeld type condition.