ID de Contribution: **3**   Type: **Non spécifié**

I-factorial Galois objects and operator algebraic quantization of Borel subgroups

vendredi 13 octobre 2017 17:05 (45 minutes)

We introduce a notion of I-factorial Galois object, consisting of a type I factor N with an ergodic, integrable action by a locally compact quantum group such that the crossed product is also a type I factor. We show that this naturally leads to the structure of I-factorial Galois object on N also for the dual locally compact quantum group, and that this correspondence is involutive. As an example, we construct a I-factorial Galois object for the Cartesian product of a q-deformed compact semisimple Lie group K with its weight lattice. We show that the associated dual I-factorial Galois object is closely related to an operator algebraic q-deformation of the Borel subgroup B of the complexification G of K, where B is considered as a locally compact group.

Orateur: DE COMMER, Kenny (VUB (Vrije Universiteit Brussel))