

Inner perturbations in noncommutative geometry

Walter van Suijlekom*

Radboud University Nijmegen - IMAPP (Mathematics)

E-mail: waltervs@math.ru.nl

Starting with an algebra, we define a semigroup which extends the group of invertible elements in that algebra. As we will explain, this semigroup describes inner perturbations of noncommutative manifolds, and has applications to gauge theories in physics. We will present some elementary examples of the semigroup associated to matrix algebras, and to (smooth) functions on a manifold. Joint work with Ali Chamseddine and Alain Connes.

References

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*Speaker.