Noncommutatative algebraic torus and its algebraic properties.

Safdar Quddus

In few articles by Yan Soibelman, the non-commutative algebraic tori were viewed as the points of compactification of the moduli space of elliptic curves. This is regarded as one of the basic model in the non-commutative algebraic geometry. Several algebraic geometric properties of the same have been studied in using the mechanisms of Functional analysis and Category theory. In this talk I plan to study some of the cohomological properties of the same under the action of discrete subgroups of $SL(2,\mathbb{Z})$. We also explore the Chern–Connes indices and the talk about the K-theory.

References

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