National Institute of Technology Rourkela

Departmental Seminar

Seminar Title : Isoclinism and Relative Central Extensions of a Pair of Lie Superalgebras

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Venue : Seminar Room, Department of Mathematics

Date and Time : 04 Jul 2024 (11.30 AM)

Abstract : In the study of Lie algebras and their representation theory, an extension e of a Lie algebra g is an enlargement of g by

another Lie algebra h. In particular, central extensions of Lie algebras and Lie superalgebras have been studied extensively by many authors in this field. Recently, the concept of relative central extension has been defined for a pair of Lie algebras and Lie superalgebras. In this work, we have shown the relation among the relative central extensions in an isoclinism family of a particular relative central extension. Here, we have first defined the notion of isoclinism on the relative central extensions of a pair of Lie superalgebras. Then, in particular, we have figured out the concept of isomorphism in the equivalence class of isoclinisms on the relative central extensions of a pair of Lie superalgebras.