

An Introduction to Lie Algebras and their Cohomology

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Abstract

In this talk, we introduce Lie algebras and several key aspects of the theory of Lie algebras, such as root systems. We then turn to the construction of the cohomology of Lie algebras. We conclude the talk by showing how the cohomology of Lie algebras is used to construct the affine Lie algebra. This talk will be accessible to graduate students.

Keywords: Lie algebra, cohomology.