國 立 清 華 大 學 數 學 系 學 術 演 講
NTHU MATH Colloquium

講題　　Classification of irreducible representations of Lie (super)algebras

講者　　陳志瑋教授（中央數學）

時間　　2022.10.03 (Mon.) 16:00 – 17:00

地點　　第三綜合大樓**2樓 Room 201（請同學配戴口罩）**

茶會　　15:30, Room 707

Abstract

A Lie superalgebra $\mathfrak{g}$ is a generalization of a Lie algebra to include a $\mathbb{Z}_2$-gradation $\mathfrak{g} = \mathfrak{g}_{\bar{0}} \oplus \mathfrak{g}_{\bar{1}}$. The representation theory of Lie superalgebras has enjoyed a recent surge of considerable interest. In this talk, we will begin with classical results in the representation theory. We will survey the state of the classification problem of irreducible representations for complex Lie algebras and superalgebras. We explain the connection between irreducible representations of $\mathfrak{g}$ and irreducible representations of the underlying Lie algebra $\mathfrak{g}_{\bar{0}}$.