

國立交通大學應用數學系 學術演講公告

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講 題：INDEX THEOREM FOR THE $\mathbb{Z}/2$ -HARMONIC SPINORS

時 間：106 年 10 月 24 日(星期二) 下午 2:00 –3:00

地 點：(光復校區) 科學一館 223 室

茶 會：當天下午 1:30 (科學一館 205 室)

Abstract

To describe the compactness theorems of $\mathrm{PSL}(2;\mathbb{C})$ connections, multiple Seiberg-Witten equation, Kapustin-Witten equation, and Vafa-Witten equation proved by Clifford Taubes, Andriy Haydys and Thomas Walpuski, the moduli space of $\mathbb{Z}/2$ -harmonic spinors and its zero loci have been introduced. A Kuranishi structure and Fredholmness for the moduli space of $\mathbb{Z}/2$ -harmonic spinors (under some regularity assumption) was proved in 3-dimensional case. In this talk, we will sketch the linearization of this moduli space and prove the index theorem for it. Also, we will discuss the 4-dimensional index theorem by assuming the linearization of the moduli space satisfies the Fredholm property.

敬請公告 歡迎參加

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