

# 國立交通大學應用數學系

## 學術演講公告

主講人：楊勘之博士 香港中文大學

講題：INDEX THEOREM FOR THE  $Z/2$ -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  $PSL(2;C)$  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  $Z/2$ -harmonic spinors and its zero loci have been introduced. A Kuranishi structure and Fredholmness for the moduli space of  $Z/2$ -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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