

# 國立交通大學應用數學系

## 學術演講公告

主講人：馬梓銘教授(國立臺灣大學數學系)

講題：From Witten-Morse theory to SYZ Mirror Symmetry

時間：105 年 9 月 20 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

Wedge product on deRham complex of a Riemannian manifold  $\$M\$$  can be pulled back to  $\$H^*(M)\$$  via explicit homotopy, constructed using Green's operator, to give higher product structures. Fukaya conjectures the Witten deformation of these higher product structures have semi-classical limits as operators defined by counting gradient flow trees with respect to Morse functions, which generalizes the remarkable Witten deformation of deRham differential. We will describe briefly the proof of Fukaya's conjecture, and an application to Mirror symmetry which realizes the scattering diagram as semi-classical limit of solution to the Maurer-Cartan equation.

敬請公告 歡迎參加

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