

國立陽明交通大學應用數學系

學術演講公告

主講人：Yat Hin Marco Suen (成功大學 數學系)

講題：An introduction to mirror symmetry

時間：113 年 11 月 12 日(星期二) 下午 14:00 –15:00

地點：(光復校區) 科學一館 213 室

Abstract

Mirror symmetry is a duality between complex and symplectic geometry. In 1994, Kontsevich proposed a mathematical definition for mirror symmetry which is now known as homological mirror symmetry (HMS). HMS predicts that the Fukaya category of a symplectic manifold is quasi-equivalent to the derived category of its mirror complex manifold. Despite HMS has been proven in many interesting cases, it's usually hard to give an exact geometric correspondence between objects due to its homological nature. Two years after Kontsevich's proposal, Strominger-Yau-Zaslow introduced an entirely geometric approach to mirror symmetry, which is now known as the SYZ proposal. SYZ suggested that mirror pairs can be obtained by taking dual torus fibration and the mirror functor in HMS can be obtained by a Fourier-Mukai-type transform. In this talk, I would like to introduce mirror symmetry from the SYZ perspective. If time permits, I will talk about realization problems in tropical geometry.

敬請公告 歡迎參加

應用數學系 啟