領域: 天文學　　指導教授: 曾瑋玲

Title: To Explore Our Solar System (探索太陽系天體)

Abstract:

This work will focus on study of atmospheric evolutions of our solar system bodies, using with the radio observations on ground, the spacecraft data and numerical modeling. With analyzing the available ALMA data (publicly released on line), the available studies include: 1) the chemical composition, evolution and dynamics in Saturn' and Titan's atmosphere; 2) Io's tenuous atmosphere generated by volcanoes; and 3) the chemical composition and distribution in the cometary coma. In addition, combining the in-situ measurements of Cassini and of Rosetta and the numerical computation, we will also work on 1) the coupling dynamics between the rings and the Saturnian system; 2) the ion-molecule chemistry in the Enceladus plumes; and 3) the dynamical evolution of the cometary coma. These efforts will improve understanding of the formation and evolution of our solar system.

**After discussion, the student can choose any topic listed above which he/she likes.*