

Joint CQSE and CASTS Seminar

2020
May 8, Friday

TIME May 8, 2020, 2:30~3:30pm
TITLE Laboratory Astrophysics: Photodesorption of Interstellar Ices
SPEAKER Prof. Yu-Jung Chen
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PLACE Rm716, CCMS & New Physics Building, NTU

Abstract

After H₂O, carbon monoxide (CO) is commonly the most abundant molecular component in interstellar and circumstellar icy grain mantles. The CO molecule is also the second most abundant, after H₂, in the gas phase of the interstellar medium. The CO gas abundances observed toward cold regions suggest that a non-thermal desorption mechanism is active. Therefore, numerous experimental studies were devoted to search for a non-thermal desorption mechanism of pure CO ice, such as photodesorption. Most works reported in astrophysical journals characterize the solid CO samples using IR spectroscopy, which allows a comparison of laboratory data to observations of CO in icy grain mantles. In the talk, we will not only present our studies of photodesorption of astrophysical ices in past few years, but also introduce you a novel measurement method for photodesorption yield of astrophysical ices.

- ▲防疫期間僅限本校人員參與 Open for members of National Taiwan University.
- ▲拒絕有發燒或呼吸道症狀者入場 Individuals with fever or respiratory symptoms are prohibited from participating in the event.
- ▲全員須全程戴口罩並與鄰座參與者保持間隔 Both faculty members and participants are required to wear sanitary masks all the time and keep gaps between each other.
- ▲場地備有酒精供雙手消毒使用 We provide alcohol sanitizer to keep your hands clean.

