

# 國立陽明交通大學應用數學系

## 學術演講公告

主講人： Prof. Albert Fannjiang (University of California, Davis)

講題： From cryo-EM to X-ray diffraction tomography

時間： 111 年 11 月 15 日(星期二) 下午 2:00 –3:00

地點：(光復校區) 科學一館 223 室

### Abstract

We analyze measurement schemes under which 3D unwrapped phase retrieval can be reduced to projection tomography.

Our motivation is to leverage highly successful projection-based techniques in cryo-EM to process diffraction data collected under measurement uncertainties such as sample heterogeneities, unknown orientations and positions.

The resulting phase unwrapping problem for 3D projection tomography can be solved by various schemes including as special cases the conical tilting at a conical angle slightly greater than  $\pi/4$ , the orthogonal dual-axis tilting and a combination of a conical tilting and an orthogonal single-axis tilting.

Finally, we will discuss some results related to phase retrieval using 1-bit information.

敬請公告 歡迎參加

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