## 國立交通大學應用數學系 學術演講公告

主講人:方 向 教授(中央大學數學系)

講 題: Random Operator Theory: Some Results and More Questions

時 間:108年3月19日(星期二)下午14:00-15:00

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

Random Matrix Theory (RMT) has evolved into a remarkably sophisticated subject, yet much less is known for its infinite dimensional counterpart, namely, Random Operator Theory (ROT). Moreover, our knowledge on ROT so far is devoted (almost) exclusively to self-adjoint and unbounded differential operators, such as random Schrodinger operators. A theory for non-selfadjoint and bounded ROT is largely missing so far. This report is on some of our initial efforts to explore this untapped area. In particular, we introduce and study a clearly fundamental yet unexplored model, which we call "random weighted shifts". Other models, such as random Hardy/Bergman spaces, random Toeplitz operators, random coefficient multipliers, random Carleson measures, etc., are proposed, but we have more questions than answers.

(Joint work with Cheng Guozheng and Zhu Sen.)

敬請公告 歡迎參加