



香港中文大學
院士講座系列

The 14th Lecture Series by Academicians from the Chinese Academy of Sciences (CAS)

Jointly Organized by
Department of Mathematics
The Institute of Mathematical Sciences
China Engagement Office

Speaker: **Prof. Ye Xiangdong**
Division of Mathematics and Physics
Chinese Academy of Sciences
中國科學院數學物理學部葉向東院士



Title: **動力系統的回復性及其應用**
Recurrence in Dynamics and Applications

Date: Thursday, 18 April 2024

Time: 10:50-11:50
(Tea reception is available on 09:00)

Venue: 康本國際學術園 2 樓 LT8 演講廳
LT8, 2/F, Yasumoto International Academic Building

Registration: http://www.cuhk.edu.hk/cneo/cas_2024/



Biography

Professor Ye Xiangdong is a professor at University of Science and Technology of China. He is engaged in the research of topological dynamics, ergodic theory and its application in combinatorial number theory. Joint with collaborators, he has carried out in-depth research on the structure theorem of dynamical systems, the convergence of multiple ergodic averages, the theory of entropy, the complexity of dynamical systems and their applications in combinatorial number theory and obtained a series of profound results. In 2013, 2018 and 2020, he won the 14th S.S. Chen Mathematics Award, the second Prize of National Natural Science (1/3) and the He Liang He Li Award for Progress in Science and Technology respectively. He was elected as a member of CAS in 2019, and a member of The World Academy of Sciences in 2023.

Abstract

Recurrence is one of the most important properties in dynamical systems. It turns out that recurrence also has many profound applications in combinatorial number theory. In this talk, I will review some well known results related to recurrence and the applications. In the process I will also explain the main tools used in the research and some that are being developed, and state certain recent results and open questions.