



DEPARTMENT OF APPLIED MATHEMATICS 應 用 數 學 系

### **PolyU PDE Seminar Series**

# **Professor Huijiang Zhao**

Wuhan University, China

**Topic** On the Vlasov-Maxwell-Boltzmann system near Maxwellians

#### **Date | Time** 16 July 2025 (Wednesday) | 16:30 – 17:30 (HK Time)

## Venue

EF312

#### Abstract:

The Vlasov-Maxwell-Boltzmann (VMB) system is the most fundamental model for dynamics of dilute charged particles. In this talk, we will review some of our results on mathematical theories of the Cauchy problem of the VMB system, which include its global solvability near Maxwellians, its global-in-time Vlasov-Poisson-Boltzmann limit as the light speed tends to infinity, and the global validity of the Hilbert expansion of the VMB system.



#### **ALL ARE WELCOME**