



DEPARTMENT OF MATHEMATICS

City University of Hong Kong

Recent Progress on the Study of Euler-Poisson System

by

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Time: 4:00 – 5:00 pm

ABSTRACT

In this talk, I will present recent results on three types (subsonic, supersonic, smooth transonic) of solutions to the steady Euler-Poisson system

$$\begin{cases} \operatorname{div}_{\mathbf{x}}(\rho \mathbf{u}) = 0 \\ \operatorname{div}_{\mathbf{x}}(\rho \mathbf{u} \otimes \mathbf{u}) + \nabla_{\mathbf{x}} p = \rho \nabla_{\mathbf{x}} \Phi \\ \operatorname{div}_{\mathbf{x}}(\rho \mathbf{u} \mathbf{B}) = \rho \mathbf{u} \cdot \nabla_{\mathbf{x}} \Phi \\ \Delta_{\mathbf{x}} \Phi = \rho - \rho_I \end{cases}$$

This talk is based on several joint works with B. Duan (Dalian University of Technology), H. Park (Yonsei University), J.-J. Xiao (Chinese University of Hong Kong) and C. Xie (Shanghai Jiao Tong University)

Register in advance for this talk:

<https://cityu.zoom.us/meeting/register/tJMpceusqzMsGd2kfLPRElthBm9pnKOV-P3H>

[Zoom link will be provided via email after registration.]



~ALL ARE WELCOME~

