

THE CHINESE UNIVERSITY OF HONG KONG Department of Physics SEMINAR

There Are Still Innovations in General Relativistic Ray Tracing!

by

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Date: May 22, 2024 (Wednesday) Time: 2:30 - 3:15 p.m.

Place: L4, Science Centre, CUHK

Abstract

General relativistic ray tracing and radiative transfer (GRRT) are numerical techniques for simulating images of black holes. They have played an instrumental role in both predicting and interpreting the horizon scale resolution images observed by the Event Horizon Telescope. Over the past two decades, these techniques have undergone continuous refinement, resulting multiple robust and open-source GRRT codes for the high energy astrophysics community. In this talk, I will present the latest innovations in GRRT developed by my collaborators and students, highlighting how they can be used to further accelerate black hole image simulations and expand our understanding of black holes.

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