

### THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

## **Department of Mathematics**

# **SEMINAR ON APPLIED MATHEMATICS**

## **Onsager's principle and design of structure-preserving numerical schemes: Part II**

By

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#### <u>Abstract</u>

Onsager's linear response theory has been the foundation for many physical models that people use today. It produces models with thermodynamically consistent entropy-production properties. These properties can guide the development of structure and property-preserving schemes for numerically solving the PDE models. Following my first talk, I will discuss in detail a couple of popular approaches and techniques to arrive at structure-preserving numerical approximations to thermodynamically consistent PDE models.

Date : 11 August 2023 (Friday) Time : 3:00pm – 4:00pm Venue : Room 3464 (Lifts 25/26)

All are Welcome!