## 國立清華大學分析研討會 NTHU Seminar on Analysis Thursday, November 6, 2025

Integral Representations of the Second-Order Cauchy

Title

**Transform** 

Speaker Yu-Jung Ku (辜宥榮·NTHU)

Time 2025.11.06 (Thu.) 14:00-15:30

Venue Room 631, 6F, General Building III

## **Abstract**

We study a power series built from the fluctuation moments of random matrices, whose limit is known as the second-order Cauchy transform.

This talk develops a point-process perspective on secondorder behavior of self-adjoint random matrices.

We construct a canonical measure and use it to obtain an integral representation of the second-order Cauchy transform.

Organizers: Hao-Wei Huang (NTHU)

Sponsor: Department of Mathematics, NTHU