

**The Hong Kong Polytechnic University  
Department of Applied Mathematics**

**Colloquium**

**Local and global structures of transmission eigenfunctions and  
applications to super-resolution imaging and electromagnetic mirage**

**By**

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**Abstract**

The interior transmission eigenvalue problems are a type of non-elliptic and non-self-adjoint spectral problems that arise in the wave scattering theory. It connects to many aspects of the direct and inverse scattering theory. In this talk, I shall discuss some of our recent discoveries on the global and local structures of the transmission eigenfunctions. We shall also consider their applications to super-resolution imaging and electromagnetic mirage.

**Date : 26 May, 2020 (Tuesday)**

**Time : 10:00-11:00** (Hong Kong Standard Time GMT +8)

**Venue : Online Talk via Zoom**(Meeting ID: 922-6008-0709)

**Click to join : <https://polyu.zoom.us/j/92260080709>**

\* The Talk will be given in English.



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**\*\*\* ALL ARE WELCOME \*\*\***

For enrolment, please send your name and email to [chingching.lu@polyu.edu.hk](mailto:chingching.lu@polyu.edu.hk) on or before 25 May 2020, Monday.