

## Department of Applied Mathematics Seminar

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### Topic

Recent advances on mathematical models of multi-layered medium

### Date| Time

19 March 2025 (Wednesday) | 15:30 – 16:30 (HK Time)

### Venue

Y306

### Abstract:

In this talk, we shall present some recent work on mathematical models of multi-layered medium, including electro-static system, Helmholtz system, elastic system etc. We shall build some elementary mathematical framework for multi-layered medium. Based on the framework, we shall show some asymptotic results for multi-layered medium, which is a special case of inhomogeneous medium. We shall also show how to design multi-layer structures of metamaterials, which may greatly increase the resonance modes, by using the algebraic framework we designed.

ALL ARE WELCOME