



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

## **Colloquium**

**Fitness based prey dispersal and prey persistence in  
intraguild predation systems**

**by**

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### **Abstract**

We establish prey persistence in intraguild persistence systems in bounded habitats under mild conditions when the prey disperses using its fitness as a surrogate for the balance between resource acquisition and predator avoidance. The model is realized as a quasilinear parabolic system where the dimension of the underlying spatial habitat is arbitrary.

**Date : 19 May, 2016 (Thursday)**

**Time : 4:30p.m. – 5:30p.m.**

**Venue : TU717, The Hong Kong Polytechnic University**

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