



DEPARTMENT OF APPLIED MATHEMATICS

應 用 數 學 系

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

Colloquium

Local uniqueness and periodicity induced by concentration

by

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Abstract

We will talk about a type of poly-harmonic equations with critical exponents and scalar curvature $K(y)$, $K(y)$ is positive and periodic in its first k variables (y_1, \dots, y_k) . Under some conditions on $K(y)$ near its critical point, we prove not only that this problem admits solutions with infinitely many bubbles, but also that the bubbling solutions obtained in our existence result are locally unique. This local uniqueness result implies that some bubbling solutions preserve the symmetry of $K(y)$.

Date : 28 April, 2017 (Friday)

Time : 11:00a.m. – 12:00noon

Venue : TU801, The Hong Kong Polytechnic University

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