

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

Working Seminar on Several Complex Variables and Complex Geometry

Dr. Avery Ching

The Hong Kong University of Science & Technology

August 10, 2015 (Monday), 9:30 – 10:30am

Room 210, Run Run Shaw Bldg., HKU

***p*-curvature and special solutions of Heun**

Abstract

Differential Galois theory is a powerful tool for detecting special solutions of differential equations. However, its computation is in general not easy. In this informal talk, we will introduce the technique of p -curvature to study differential Galois groups. Then we apply it to classify special solutions of the Heun equations. The work is still in progress and discussion in the talk would be much appreciated.

All are welcome