THE UNIVERSITY



OF HONG KONG

Institute of Mathematical Research Department of Mathematics

## **GEOMETRY SEMINAR**

## Finite abelian covers and ball quotient surfaces

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## Abstract

This talk will develop a general method of abelian covers and give some applications. We will introduce that any abelian cover can be defined by some standard equations, which are different from Pardini's defining date. The normalization, the branch locus and the formulas for the global invariants can be determined from the defining equations. As applications, some algebraic surfaces of general type with  $c_1^2 = 3c_2$  will be given. And the singular fibers of these surfaces are all geodesics.

Date: October 11, 2012 (Thursday)

Time: 4:00 – 5:00pm

Place: Room 210, Run Run Shaw Bldg., HKU

All are welcome