

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research*

*Department of Mathematics*

# WEEKLY SEMINAR IN FINITE GEOMETRY

**Some topics covered:** Characterizations of geometric designs; Codes and designs; Difference sets and their generalizations; Finite projective planes.

**Some typical questions:** Is it possible to prove, without using codes, that if a generalized quadrangle has one antiregular point then all of its points are antiregular? How does one recognize whether or not a unital is classical? Which unitals admit packings? Is there a cyclic projective plane which is not Desarguesian? Must the order of a finite projective plane be a power of a prime?

**Organization:** Each working seminar consists of two parts. The first part deals with background materials: these include established theories, known examples and methodology. The second part deals with current research problems. Since these are working seminars, the aim is for participants to find something to work on, rather than just to hear the summary of completed research.

**Schedule:** Every Monday from 2:00pm to 5:30pm in Room 309, Run Run Shaw Building, HKU, starting 3 September 2012.

**Chaired by:** Dr. P.P.W. Wong, Department of Mathematics, The University of Hong Kong

*All are welcome*