



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON APPLIED MATHEMATICS

On the size of maximal binary codes

By

Prof. Wei-Hsuan Yu

Department of Mathematics
National Central University

Abstract

We address the problems of maximum size of binary codes and binary constant weight codes with few distances. Previous works established a number of bounds for these quantities as well as the exact values for a range of small code lengths. As our main results, we determine the exact size of maximal binary codes with two distances for all lengths $n \geq 6$ as well as the exact size of maximal binary constant weight codes with 2, 3, and 4 distances.

Date : 11 November 2024 (Monday)

Time : 10:00a.m.

Venue : Room 4503 (near Lift 25/26)

All are Welcome!