



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

**Some recent progress on permutation polynomials
Part (II)**

by

Dr. DING Zhiguo
University of Michigan

Abstract

In this talk, we will introduce a general procedure for producing large classes of permutation polynomials over F_{q^2} from any prescribed permutation rational function over F_q , and we will show that even the simplest permutation rational functions yield many interesting permutation polynomials. We will also classify permutation polynomials with certain forms using tools from algebraic geometry and group theory which have not previously been used in this topic.

This is a joint work with Michael Zieve.

Date : 24 May 2022 (Tuesday)

Time : 2:00pm – 3:00pm

Zoom Meeting : <https://hkust.zoom.us/j/96484027452> Passcode (322024)

All are Welcome!