



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

**Sequences with Good Properties for Modern
Communication and Radar**

by

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Abstract

Large sets of sequences with optimal correlation and low PAPR are preferred in modern wireless communication and radar. In this talk, we shall introduce the metrics (including correlation and PAPR) of sequences for measuring their performance in practical applications. We then recall the well-known bounds on these metrics, and some classical sequences meeting the bounds. We shall also introduce a new family of sequences with large size, optimal correlation and low PAPR, which are desirable in 6G.

Date : 04 February 2025 (Tuesday)

Time : 2:00p.m. – 3:00p.m.

Venue : Room 2408 (Lifts 17/18)

All are Welcome!