

#### THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

### **Department of Mathematics**

## SEMINAR ON PURE MATHEMATICS

# Group Factorizations and Symmetric Embeddings of Graphs

by

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### **Abstract**

The factorization problem of groups, known as the dual counterpart to the renowned extension problem in group theory, has garnered significant interest owing to its profound ties to various fields, including group theory, combinatorics, and Hopf algebra. This presentation aims to provide a succinct overview of these intricate interconnections, placing particular emphasis on the classification of exact factorizations with a cyclic or dihedral factor. Furthermore, we will explore its practical implications in the realms of regular Cayley maps and the theory of skew morphisms.

Date : 26 August 2024 (Monday)

Time : 4:00p.m.-5:00p.m.

Venue: Room 2504 (near Lift 25/26)

All are Welcome!