THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON SCIENTIFIC COMPUTATION

Efficient Symmetry Handling In Optimization

by

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<u>Abstract</u>

Symmetry exists everywhere in the world. While it is pleasing to the eyes aesthetically, its presence in optimization problems makes the underlying problem much harder to solve: it degrades the performance of the branch-and-bound algorithms, it blows up the memory for column generations algorithm and it makes the machine learning algorithms much less effective. In this talk, we touch upon how to detect symmetries, and several different ways for handling the detected symmetries. We will provide numerical examples to showcase the efficacies of these techniques.

Date : 10 November 2022 (Thursday)

Time : 4:00pm – 5:00pm

Venue : Room 3472 (Lifts 25/26)

All are Welcome!