國立陽明交通大學應用數學系
學術演講公告

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講　題：Improved Approximation Algorithm for Capacitated
　　　　Facility Location with Uniform Facility Cost

時　間：113 年 5 月 14 日(星期二) 下午 13:30 –14:20

地　點：(光復校區) 科學一館 223 室

Abstract

　　We consider the hard-capacitated facility location problem with uniform facility cost (CFL-UFC). This problem arises as an indicator variation between the general CFL problem and the uncapacitated facility location (UFL) problem, and is related to the profound capacitated k-median problem (CKM). In this work, we present a rounding-based 4-approximation algorithm for this problem, built on a two-staged rounding scheme that incorporates a set of novel ideas and also techniques developed in the past for both facility location and capacitated covering problems. Our result improves the decades-old LP-based ratio of 5 for this problem due to Levi et al. since 2004. We believe that the techniques developed in this work are of independent interests and may further lead to insights and implications for related problems.

敬請公告　　歡迎參加

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