On the minimal taxation rate for bin packing games

Xian Qiu

Discrete Mathematics & Mathematical Programming (DMMP)

Date & Place: 10 November 2011, Citadel H327

Time: 15:45–16:45

Abstract:

A cooperative bin packing game is a $N$-person game, where the player set $N$ consists of $k$ bins of capacity 1 each and $n$ items of sizes $a_1$, ..., $a_n$. The value of a coalition of players is defined to be the maximum total size of items in the coalition that can be packed into the bins of the coalition. We present an alternative proof to the non-emptiness of $1/3$-core for all bin packing games and show how to improve this bound $1/3$ (slightly).