

The inventory capacity problem

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Abstract

In this talk I will discuss the Inventory Capacity Problem, which is a well-studied problem in industrial and systems engineering that concerns how to minimize the size of a warehouse given information about the products to be stored, in particular the product sizes, capacities, and delivery schedules. I will explain how ideas from combinatorial and multiplicative number theory can be used to analyze certain extremal instances of the problem.

Joint work with Kai Huang.