Distinguished Lecture Series

The Global Impact of Integer Programming



Monday, December 9th, 2013 10:00am Auditorium 106 at New IIS Building

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Abstract

Integer programming is the (not very appealing or descriptive) name for optimization models and algorithms in which some variables are required to have integer values. Planning and operational problems in energy, finance, health, manufacturing, military, transportation, and in almost any imaginable domain where decisions are made, are formulated and solved using integer programming. For example, most Fortune 500 companies use integer programming in some aspects of their business. Currently available software is capable of solving models with thousands, and sometimes millions, of variables and constraints. We will discuss some integer programming models whose solutions have had big impact in solving important problems, and present recent progress that has made it possible to solve very large instances and to obtain provably good solutions quickly. We'll close by speculating on future advances in methodology and applications.

For more infomation: http://www.iis.sinica.edu.tw/







