

数学与系统科学研究院  
计算数学所系列学术报告

报告人: **Prof. Thorsten Koch**

( *Zuse Institute Berlin, Germany* )

报告主题:

**Computational Mixed Integer  
Programming**

报告时间:

2011 年 11 月 14 日 (周一) 09:00-12:00 lecture1

2011 年 11 月 14 日 (周一) 14:00-17:00 lecture2

(建议携带笔记本电脑)

2011 年 11 月 15 日 (周二) 10:00-12:00 lecture3

报告地点: 科技综合楼三层 311

计算数学所报告厅

邀请人: 刘歆博士

## 报告题目:

lecture1.1 -> State of the Art in Mixed Integer Programming

lecture1.2 -> The ZIB Optimization Suite

lecture1.3 -> Introduction to Zimpl and SCIP

lecture2.1 -> Modeling with Zimpl and SCIP (COatWork)

lecture2.2 -> Modeling with Zimpl and SCIP (COatWork)

lecture2.3 -> Modeling with Zimpl and SCIP (COatWork)

lecture3.1 -> Notes about Scientific Programming

lecture3.2 -> Introduction to Programming with SCIP

## 报告摘要:

**How do you solve a combinatorial optimization problem?**

**This lecture offers a guide to the use and the implementation of modern computer oriented solution methods of integer programming. Choosing a suitable model, preprocessing, deriving lower and upper bounds by relaxations, and heuristics as well as the separation and application and of cutting planes in branch-and-cut methods are discussed. The application of these techniques is trained in the exercise part using advanced software tools such as Zimpl and SCIP.**

**欢迎大家参加!**