## 数学与系统科学研究院 计算数学所学术报告

## <u>报告人:</u> Prof. Zhijun Wu

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<u>报告题目</u>:

## A Direct Geometric Method for Sensor Network Localization\*

邀请人: 优化与应用研究中心

<u>报告时间</u>:2010年12月10日(周五)

上午9:30-11:00

<u>报告地点</u>: 科技综合楼三层 **301** 计算数学所小报告厅

## Abstract:

We present a geometric buildup algorithm for solving the sensor network localization problem with either accurate or noisy distance data. The algorithm determines the locations of the sensors, one at a time, by using the distances between the determined sensors and the undetermined ones. Each time, only a small system of distance equations needs to be solved and therefore, in an ideal case when the required distances are available for every sensor to be determined, the computation can be completed in n steps if n sensors are to be determined. An algorithm with two buildup phases is also implemented to handle not only noisy but also sparse distance data with for example only a few distant anchors. We show our test results and compare them with other approaches.

\*Joint work with

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欢迎大家参加!