

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Orizon P. Ferreira**

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报告题目:

**A robust Kantorovich's theorem on
inexact Newton's method with
relative residual error tolerance**

邀请人: 戴彧虹 研究员

报告时间: **2013 年 11 月 7 日 (周四)**

下午 14:30-15:30

报告地点: 科技综合楼三层 **311**

计算数学所报告厅

Abstract:

We prove that under semi-local assumptions, the inexact Newton method with a fixed relative residual error tolerance converges Q-linearly to a zero of the nonlinear operator under consideration. Using this result we show that the Newton method for minimizing a self-concordant function or to find a zero of an analytic function can be implemented with a fixed relative residual error tolerance.

欢迎大家参加!