

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. ZHOU Hongbo**

( *Statoil* )

报告题目:

**Dispersion relations and differential equations: a review**

邀请人: 张林波 研究员

报告时间: **2016年4月5日 (周二)**

**上午 10:30**

报告地点: 数学院南楼七层

**702 会议室**

## **Abstract:**

Dispersion relations have been too crucial to be ignored in seismic imaging since almost all differential equations in seismic imaging are more or less related to them. In this presentation, we will discuss a variety of dispersion relations and their applications in exploration seismology. Specifically, we will examine some differential equations that are derived from dispersion relations. The covered equations may include, but are not limited to, ray equations, one-way wave equations, two-way wave equations, anisotropic VTI/TTI equations, etc. We will also study their corresponding numerical solutions in seismic imaging.

## **CV:**

Hongbo Zhou held a B.S from Xi'an Jiaotong University and a M.S. from previous Computing Center, Chinese Academy of Sciences, majoring in Computational Mathematics. He was awarded a Ph.D in Geosciences from The University of Texas at Dallas. He is now working as a leading researcher and team leader in Statoil, a Norwegian oil company. His main research interests are in various numerical algorithms, high performance computing, and their applications in exploration geophysics, such as seismic migration, velocity analysis, and wavefield inversion, etc.

**欢迎大家参加！**