## 数学与系统科学研究院 计算数学所系列学术报告

#### <u>报告人</u>: Prof. Chandrajit Bajaj

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#### 报告题目:

#### Making the Invisible, Visible

#### 邀请人: 陈冲 博士

# <u>报告时间</u>: 2018 年 11 月 13 日(周二) 上午 10:00-11:00

<u>报告地点</u>:数学院南楼二层 202 教室

### Abstract:

RGB multispectral video that span the visible electromagnetic spectrum (400nm - 700nm) are now commonplace, with the advent of color video cameras. Near, mid, far Infrared (IR) hyper spectral imaging, that capture a portion of the human invisible spectrum (700 nm - 1mm) have additionally proven indispensable for many scenarios such as night vision, video surveillance, terrain sensing via satellites, as well as early detection of cancer. Both multispectral and hyper spectral forms of imagery are now seeing use for navigation/control, in automobiles, transport vehicles and even drones. This spectral imagery, enables the simultaneous prediction of the visible and invisible geometry and material properties of complex scenes. This talk shall dwell on the success, and current challenges of state of the art, machine learning algorithms for spectral de-noising, data fusion, latent feature discovery, super-resolution.

### <u>报告人简介</u>:

Chandrajit Bajaj is a Professor in the Department of Computer Science, and Institute of Computational Engineering and Sciences, and Center for Computational Visualization at The University of Texas at Austin, USA. He received his B.Tech. in Electrical Engineering (1980) from Indian Institute of Technology, New Delhi, India; and his M.S. and Ph.D. in Computer Sciences (1983, 1984) from the Cornell University, Ithaca, USA. He is the Fellow of AAAS, Fellow of ACM, Fellow of IEEE, and Fellow of SIAM.

欢迎大家参加!