

报告题目：

Imaging Flames: From advanced laser diagnostics to snapshots

报告人：Prof. Marshall B. Long

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报告时间：2012年10月24日(周三) 13:30

报告地点：热能工程系馆报告厅

主持人：姚强 教授 清华大学热能工程系



教授简介：

学术经历： 1976 University of Montana BA in Physics
1978 Yale University M.S. in Applied Physics
1980 Yale University Ph.D. in Applied Physics

工作经历： July 1980 - June 1984 Assistant Professor
Yale University Department of Mechanical Engineering
July 1984 - June 1990 Associate Professor
Yale University Department of Mechanical Engineering
July 1990 - now Professor
Yale University Department of Mechanical Engineering and Materials Science

研究领域：

Prof.Long's early work concentrated on developing new laser-based imaging techniques for quantitative measurements in reacting and non-reacting flows. New techniques were developed that incorporated Lorenz/Mie, Rayleigh, Raman and fluorescence scattering for measurements in two, three, and even four dimensions in turbulent flows and flames. Current emphasis of Prof.Long's group continues to involve development and application of optical diagnostics to combustion. One of the new ideas that originated in Prof.Long's group deals with a paradigm shift in the interaction of experiments and computations in combustion research.

代表文章 (H-index 23):

- ✧ [Laser-Emission from individual droplets at wavelengths corresponding to morphology-dependent Resonances](#), Tzeng. HM, Wall KF, Long MB, Optics letters,1984,9,499-501 (cited:287)
- ✧ [Discrimination of normal and atherosclerotic aorta by laser-induced fluorescence](#), Deckelbaum. Li, Lam. JK, Cabin. HS, Long MB, Lasers in surgery and medicine,1987,7,330-& (cited:100)
- ✧ [Soot formation in laminar diffusion flames](#), Smooke. MD, Long. MB, Connelly.BC, Combustion and flame, 2005,143, 613-628. (cited:49)
- ✧ [Reaction-rate, mixture-fraction, and temperature imaging in turbulent methane/air jet flames](#), Frank. JH, Kaiser. SA, Long MB. Proceedings of the combustion institute,2002, 29, 2687-2694 (cited:34)

