



# SEMINAR

Centre for Optical and Laser Engineering (COLE)  
School of Mechanical & Aerospace Engineering,  
Nanyang Technological University



In conjunction with  
OPSS (Optics and Photonics Society of Singapore)  
SPIE (Student Singapore Chapter)

**Title: 3D holographic display**  
**Speaker: Prof. Yu Yingjie, Tan Chin Tuan Fellow**

*Affiliation: Shanghai University*

Date : Dec. 10, 2012

Time : 10 :00 am

Place : LT5

## ABSTRACT OF TALK

Three dimensional (3D) technologies are becoming increasingly popular for both imaging and display. Some methods have been developed for 3D display, such as stereoscopic/auto-stereoscopic display, integral imaging, volumetric display, holography. The most significant advantage of holography is that it is capable of recording and reconstructing whole information (intensity and phase) of three-dimensional (3D) object. As developments in digital devices and optical elements grow rapidly with the advent of high-performance computers and spatial light modulators, digital holographic display (DH display) is now attracting more and more people's attention. So, what is DH display? What are the advantages of DH display? How to realize DH display? I shall try to answer these questions in this talk.

## BRIEF BIOGRAPHY

Prof. Yingjie Yu, graduated from Harbin Institute of Technology of China where she received her Master's and PhD degrees in 1996 and 1998 respectively. She then joined Department of Precision Mechanical Engineering, School of Mechatronic Engineering and Automation at Shanghai University, where she is currently Professor. Her teaching area is in optical engineering and precision measurement, and her research interest is in optical precision measurement, especially on interferometry, digital holography, electronic speckle pattern interferometry and their applications in non-destructive testing and 3D display. She was awarded the Shanghai municipal natural science third prize in 2012. She is also the Vice Dean (research and international affairs) of the School of Mechatronic Engineering and Automation of Shanghai University and Executive member and General Secretary of the Precision Machinery sub-society of China Instrument and Control Society.

Prof. Yu is currently visiting NTU under the Tan Chin Tuan Fellow program

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