# Joint CQSE & NCTS Seminar

**2022 May. 27, Friday** 

TIME May. 27, 2022, 2:30~3:30pm

TITLE Quantum Controllability for Simple Quantum Control

Problems -How fast a quantum control can be achieved?

SPEAKER Associate Professor, Yoshiaki Teranishi (Institute of Physics,

National Yang Ming Chiao Tung University)

PLACE Online:

wanuniversity-zbh.my/j.php?

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### Abstract:

In this talk, we analyze several quantum control problems from the point of view of controllability, which we define as a measure of the difficulty of achieving a target control. Firstly, we introduce our method to discuss controllability using the optimal control theory. After that we analyze several control problems using it.

## **Biography Brief:**

### Education

International Christian University (Tokyo Japan) (B. Sc. in Physics) May 1994.

International Christian University (Tokyo Japan) (M. Sc. in Physics) May 1996.

The Graduate University for Advanced Studies (Okazaki Japan) Ph. D. (Doctor of Science) May 1999.

### Work Experiences

April 1, 1999 – Mar 31, 2002:

Special Postdoctoral Fellow at RIKEN, (Saitama, Japan).

April 1, 2002 – December 31, 2004:

Postdoctoral Fellow at Japan Atomic Energy Research Institute (Kyoto, Japan).

January 1, 2005 – May 31, 2006:

Postdoctoral Fellow at Tohoku University (Miyagi, Japan).

June 1, 2006 – April 30, 2007:

Assistant Professor at Tohoku University (Miyagi Japan).

May 1, 2007 – Dec 31, 2007:

PostDoctoral Fellow at Institute of Atomic and Molecular Science, Academia Sinica (Taipei ROC).

Jan 1, 2008 – Apr 30, 2008:

PostDoctoral Fellow at Research Center for Applied Sciences, Academia Sinica (Taipei ROC).

May 1, 2008 – January 31, 2011:

Research Assistant Fellow, National Chiao-Tung University (Hsin-Chu ROC).

February 1, 2011 –July 1, 2016:

Assistant Professor, National Chiao-Tung University (Hsin-Chu ROC).

August 1, 2016-Present:

Associate Professor, National Chiao-Tung Universitty (Hsin-Chu Roc)