

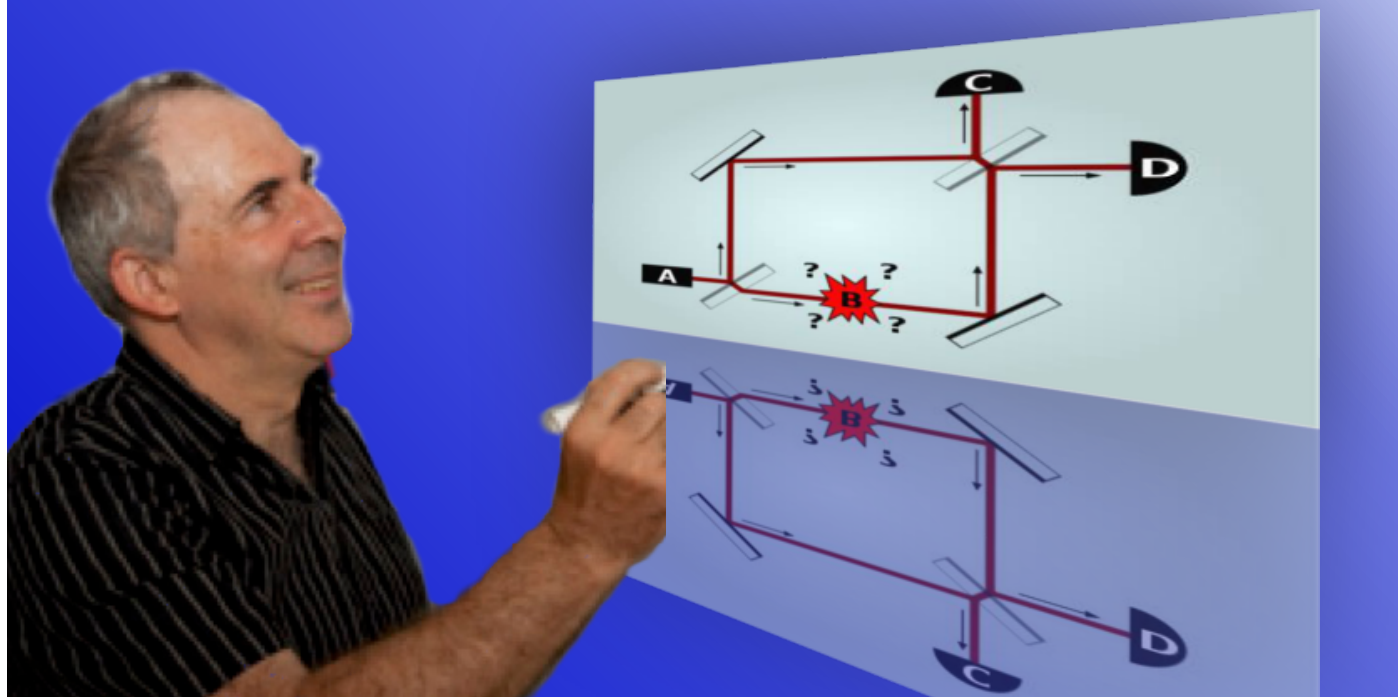
MAIN FEATURED SPEAKER:

# LEV VAIDMAN

## TEL AVIV UNIVERSITY

July 10, 2017 (Mon)

Rm. L911, Sophia University, Tokyo



## Workshop on Fundamental Aspects of Quantum Mechanics as they relate to Atomic, Molecular and Optical (AMO) physics

Organizers:

AZUMA Yoshiro  
(Sophia Univ.)

KOIKE Fumihiko  
(Sophia Univ.)

TSUTSUI Izumi  
(KEK)

Other Characters:

KOSUGI Satoshi  
(Sophia Univ.)

KOUCHI Noriyuki  
(Tokyo Inst. Tech.)

EZAWA Hiroshi  
(Gakushuin Univ.)

and more.

Prof. Lev Vaidman, one of the world's foremost experts on the fundamental aspects of quantum mechanics, will visit Sophia University on July 10, 2017. He is a pioneer in the recently fashionable area of "weak measurements and weak values," leading advocate of the "many worlds interpretation," and famed for his "Elitzur-Vaidman bomb tester." We have decided to take this opportunity to organize a workshop combining his lecture with some presentations by Sophia and TIT scientists on atomic and molecular physics that relate to the fundamentals, in particular "quantum entanglement." Theoretical efforts at KEK will also be presented. We are hopeful for some cross-germination, but of course it is most important to have fun with physics and to deliver the message that "fundamentals are important." Please come join us for an afternoon, filled with friendly discussions on physics.

Contact: AZUMA Yoshiro [y-azuma@sophia.ac.jp](mailto:y-azuma@sophia.ac.jp)

## Program

### Workshop at L-911

- 13:30– “Welcome and Introduction”  
AZUMA Yoshiro, Sophia University
- 13:40– “PCI Recapture of Photoelectron, and Quantum Entanglement.”  
KOSUGI Satoshi, Sophia University
- 14:10– “Entangled Two Electron Configurations in Post Collision Processes”  
KOIKE Fumihiko, Sophia University
- 14:40– “Are Entangled Pairs of Fragment Atoms Produced in the Photodissociation of H<sub>2</sub>?”  
KOUCHI Noriyuki, Tokyo Institute of Technology.
- 15:10– Coffee Break
- 15:30– “The Past of a Quantum Particle”  
Lev Vaidman, Tel Aviv University  
(Dept. of Materials and Life Sciences Colloquium, Sophia Univ.)
- 16:30– “Weak Value from Quasi-Probability”  
TSUTSUI Izumi,  
High Energy Accelerator Research Organization (KEK)
- 17:00– Concluding Remarks
- 17:15– Further Informal Discussion (Rm. 4-391B)
- 18:15– Dinner