

International Symposium on Attosecond Science

July 30 (Sat), 2016

Koshiba Hall, The University of Tokyo, Japan

Organizers

Institute for Photon Science and Technology, The University of Tokyo

Photon Science Center, The University of Tokyo

Center for Advanced Photonics, RIKEN

Division of Applied Physics, Graduate School of Engineering, Hokkaido University

COI-STREAM Innovative Center for Coherent Photon Technology

MEXT Advanced Photon Science Alliance

Organizing Committee

JST-CREST "Innovation of Attosecond Reaction Dynamics Controller" Team

Kenichi L. Ishikawa (The University of Tokyo)

Yasuo Nabekawa (RIKEN)

Taro Sekikawa (Hokkaido University)

JST-PRESTO "Control of Chemical Reactions Using Ultrafast Charge Migration Processes"

Tomoya Okino (RIKEN)

Program

Opening session (Chair: Tomoya Okino (RIKEN, Japan))

10:00-10:05

Opening remark

Kenichi L. Ishikawa (The University of Tokyo, Japan)

10:05-10:10

Welcome address

Makoto Gonokami (President, The University of Tokyo, Japan)

10:10-10:15

Welcome address

Ken-ichi Kitayama (The Graduate School for the Creation of
New Photonics Industries, Japan)

10:15-10:20

Welcome address

Ken-ichi Ueda (University of Electro-Communications, Japan)

Keynote talk (Chair: Kenichi L. Ishikawa (The University of Tokyo, Japan))

10:20-11:00

Paul Corkum (NRC Canada & University of Ottawa, Canada)

“High harmonic generation from atoms and solids”

Session I: Source (Chair: Yasuo Nabekawa (RIKEN, Japan))

11:00-11:30

Jiro Itatani (The University of Tokyo, Japan)

*“Intense few-cycle IR sources for attosecond science:
new opportunities at higher energies and in solids”*

11:30-12:00

Takao Fuji (Institute for Molecular Science, Japan)

“Self-referenced light wave measurement of few-cycle pulses”

12:00-12:30

Eiji J. Takahashi (RIKEN, Japan)

*“Multi-color waveform synthesizer for generating
microjoule-scale isolated attosecond pulses at 100 eV”*

12:30-13:30

Lunch

Session II: Theory (Chair: Kenichi L. Ishikawa (The University of Tokyo, Japan))

13:30-14:10

Joachim Burgdörfer (Vienna University of Technology, Austria)

“Attosecond chronoscopy of photoemission”

14:10-14:40

Daniel Haxton (University of California Berkeley, USA)

“Implementation of Multiconfiguration Time-Dependent Hartree-Fock for polyatomic molecules”

14:40-15:10

Tomohito Otobe (QST, Japan)

“Attosecond and sub-cycle spectroscopy under an intense laser field: Theory, Simulation and Experiment”

15:10-15:40

Coffee Break

Session III: Application (Chair: Taro Sekikawa (Hokkaido University, Japan))

15:40-16:20

Hans Jakob Wörner (ETH Zürich, Switzerland)

“Attosecond science with gases and liquids: from the extreme ultraviolet to soft X-rays”

16:20-16:50

Kiyoshi Ueda (Tohoku University, Japan)

“Ultrafast electronic and nuclear dynamics induced by intense ultrashort XFEL pulses”

16:50-17:20

Kaoru Yamanouchi (The University of Tokyo, Japan)

“Time-resolved imaging of ultrafast dynamics of small molecules”

17:20-17:25

Closing remark

Junji Yumoto (The University of Tokyo, Japan)