

# Joint Symposium on Collision Processes of Highly-Charged Ions and Related Topics

合同研究会：多価イオン衝突研究とその周辺

TMU Research Program "Ion Storage Research Network for Molecular Science"

ISAS Workshop on Atomic and Molecular Processes in Space

首都大学東京研究環セミナー・宇宙科学研究所 宇宙空間原子分子過程研究会

Date: February 3<sup>rd</sup> (Fri.)

Place: Meeting Room, International House, Tokyo Metropolitan University

首都大学東京国際交流会館中会議室

Map : [http://www.tmu.ac.jp/english/university/campusmap.html#map\\_minamiosawa](http://www.tmu.ac.jp/english/university/campusmap.html#map_minamiosawa)

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## Program

10:00-10:10 *Opening: Atsushi Ichimura (JAXA)*

Session #1    vdW dimers

Chair: *J.H. Sanderson*

10:10-10:40 *Amine Cassimi (GANIL)*

Intra-cluster processes in multiple ionization of molecular and van der Waals dimers

10:40-11:10 *Jun Matsumoto (TMU)*

Multi-electron capture processes in collision between argon dimers and highly charged ions in low energy region

11:10-11:40 *Tomoko O. Yamaguchi (Tokyo Metro. Col. Indus. Tech.)*

A three-center model for multiple ionization of rare gas dimers by slow highly charged ions

Session #2    Capillaries

Chair: *A. Cassimi*

11:50-12:20 *Natsuko Fujita (Nara Women's U.)*

Transmission property and its applications of MeV ion beams with various

capillaries

12:20-12:50 *Tokihiro Ikeda (RIKEN)*

Application of keV and MeV ion microbeams through tapered glass capillaries

Session #3      Traps and Rings

Chair: *T. Azuma (RIKEN)*

14:30-15:00 *Motoshi Goto (RIKEN)*

Laser-induced delayed detachment of  $C_5^-$  stored in an electrostatic ring

15:00-15:30 *Hayato Ohashi (UEC)*

Emission spectroscopy of highly charged tungsten ions using electron beam ion traps

15:30-16:00 *Xavier Flechard (IPC Caen)*

First measurement of a pure electron shake-off in beta decay of trapped  ${}^6\text{He}^+$  ions

Session #4      Molecules

Chair: *X. Flechard*

16:10-16:40 *Jun-ichi Adachi (KEK)*

Core-level photoelectron angular distributions for fixed-in-space CO and CO<sub>2</sub> molecules with a kinetic energy of up to 150 eV

16:40-17:10 *Takuya Majima (Kyoto U.)*

Correlation between multiple ionization and fragmentation of molecules in fast heavy ion collisions.

17:10-17:40 *Joseph H Sanderson (U. Waterloo)*

Comparing Coulomb explosion results from ion impact experiments at TMU with few cycle laser pulse results from the ALLS lab

17:40 Closing: *H. Shiromaru*

Session #5      Beers

18:00-

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