RIKEN Symposium

Production of Ultra Slow Highly-Charged Ions and Its Application (final)

December 2-3, 1999: 9:30 to 17:40
Nishina Hall, Riken
Contact: Atomic Physics Lab. (tel: +48-467-9482, fax: +48-462-4644)

Dec. 2 (Thursday)

9:30-9:35: Welcome & Symposium Plan

9:35-10:00 (25min.): Summary of Beam Microcapillary Spectroscopy
Y.Yamazaki (RIKEN)

10:00-10:20 (20min.): Soft X-ray spectroscopy of slow highly charged ions through microcapillary
Y. Iwai (Univ. Tokyo)

10:20-10:50 (30min.): Spectroscopy of High Rydberg States of Highly Charged Ions and Antiprotonic Helium Atoms
A. Torii (Univ. Tokyo)

Coffee Break 10:50-11:10 (20min.)

11:10-11:40 (30min.): Slow or trapped RI-beams from projectile fragment separators and their laser spectroscopy
M. Wada (Riken)

11:40-12:10 (30min): Present status of Coulomb explosion imaging study at TMUECRIS
H.Shiromaru (Tokyo Metro Univ.)

12:10-12:40 (30min.): RECRIS and future experiments with slow highly charged ions at NIPNE
C. Ciortea (NIPNE, Romania)

Lunch 12:40-13:50 (70min.)

13:50-14:30 (40min.): Activities in the Project "Cold Trapped Ions"
S. Ohtani (Univ. Electro-comm.)

14:30-15:00 (30min.): The cool on the hill: trapped ions in an EBIT
F. Currell (Queens' Univ. Belfast)

15:00-15:30 (30min.): Theoretical analysis of decay processes of inner-hole states of atomic ions
T.Kagawa (Nara Women's Univ.)

Coffee Break 15:30-16:00 (30min.)

16:00-16:20 (20min.): Slow HCI production and facility at Atomic Physics Lab.
Y. Kanai (Riken)

16:20-16:40 (20min.): Development of a new positron accumulator using an electron cooling technique
N. Oshima (Riken)

16:40-17:00 (20min.): MCI cooling with cold positrons in a Penning-Malmberg Trap
T. M. Kojima (Riken)

17:00-17:40 (40min.): Developments of Superconductor Radiation Detectors and their application
H. Shimizu (Riken)

Symposium Dinner 18:00-20:00

Dec. 3(Friday)

9:30-10:20 (50min.)
On scattering and x-ray emission of slow HCI hitting surfaces
R. Schuch (Stockholm Univ., Sweden)

10:20-10:50 (30min.)
Ion beam induced dry etching and related surface processes
T. Meguro (Riken)

Coffee Break 10:50-11:10 (20min.)

11:10-11:50 (40min.)
Nanoscale Surface Structure Modification Using Extremely Large Local Electric Field and Current Density Induced by STM Tip
M. Aono (Riken)

11:50-12:30 (40min.)
New results on the mechanisms of formation of hollow atoms above and below a surface
J. P. Briand（Marie Curie Inst., France）

Lunch 12:30-13:40 (70min.)

13:40-14:10 (30min.)
Recent Progress in High-Order-Harmonic Generation
K. Midorikawa (Riken)

14:10-15:00 (50min.)
X-ray emission of hollow ions created with high intensity lasers
F. Rosmej (Darmstadt Tech.Univ., Germany)

15:00-15:20 (20min.)
Plan of Multiple ionization experiment of neutral atom with Ultra fast TW-laser in Riken
Y. Nakai (Riken)

Coffee Break 15:20-15:50 (30min.)

15:50-16:30 (40min.)
Highly charged ions interacting with thin-film covered surfaces
R. Morgenstern (KVI, University Groningen, , The Netherlands)

16:30-17:10 (40min.)
Plasmon production by the decay of hollow atoms formed at an Al surface
N. Stolterfort (Hahn-Meitner Institut, Germany)

17:10-17:30 (20min.)
Phase II Research with Slow Highly Charged Ions
Y. Yamazaki (Riken)

17:30-: Optional Tour to the Experimental Hall of Highly Charged Ion