

## Scientific Program

**Friday July the 19<sup>th</sup>, 2013**

10:00 am-18:00 pm Registration

18:00 pm-20:00 pm Reception

**Saturday July the 20<sup>th</sup>, 2013**

8h20-8h40      **Opening Address (Chair: J G Wang)**

8h40-9h00      **Photograph**

9h00-10h15    **Fundamental processes in ion-atom/molecule collisions  
(Chair: X. Ma)**

9h00-9h25:

**T. Kirchner**: Ion-molecule collisions studied with a combination of a microscopic collision calculation and a semi-phenomenological fragmentation model

9h25-9h50:

**K. Beroff**: single and double electron capture in high-velocity  $Cn^+$ ,  $Cn-He$ ,  $Ar$  collisions

9h50-10h15:

**I. Rabadan**: Ab initio study of electron capture and single ionization in proton collisions with  $N_2$

10h15-10h35

**Pause**

10h35-11h50    **Fundamental processes in ion-atom/molecule collisions  
(Chair: J. Walters)**

10h35-11h00 :

**A. B. Voitkiv**: Correlated transfer-ionization in collisions of fast highly charged ions with helium

11h00-11h25:

**Y. Wu**: Recent theoretical progresses on atom-ion collisions in IAPCM

11h25-11h50:

**A. Kadyrov**: Calculation of antiproton-impact ionization of  $H_2$  allowing for all

target orientations

- 11h40-14h00      **Lunch**
- 14h00-15h15      **New developments techniques and instrumentation applications /(Chair: A. Cassimi)**
- 14h00-14h25:  
                  **R. D. Thomas**: Physics with cold stored ion beams
- 14h25-14h50:  
                  **R. D. Dubois**: A new interpretation for the differences in double ionization resulting from particle and antiparticle impact
- 14h50-15h15:  
                  **T. M. Kojima**: Ion beam guiding with straight and curved insulator capillaries
- 15h15-16h30      **New developments techniques and instrumentation applications /(Chair: R. D. Thomas)**
- 15h15-15h40:  
                  **P. -M. Hillenbrand**: Electron spectroscopy at the high-energy endpoint of electron-nucleus bremsstrahlung
- 15h40-16h05:  
                  **Y. Enomoto**: Development of a cryogenic electrostatic ion storage ring in RIKEN
- 16h05-16h30:  
                  **S. F. Zhang**: Mutual ionization in H-He collisions
- 16h30-18h00      **Poster session**
- 18h30              **Banquet**

**Sunday July 21<sup>st</sup>, 2013**

8h45-10h00 **Fragmentation of bio-molecules and clusters / New developments technic and instrumentation applications (Chair: Y. Z. Qu)**

8h45-9h10:

**O. Marchuk**: Role of ion-atom collisions in the fast-beam diagnostics of fusion plasmas

9h10-9h35:

**M. Schoffler**: Rare gas dimers interacting with (highly charged) ions-properties and ionization/fragmentation dynamics

9h35-10h00:

**R. Bredy**: Decay of anthracene dication versus excitation energy in collision with proton and  $F^+$  ions

10h00-10h25

**Pause**

10h25-11h40

**Ion-surface interaction / Fragmentation of bio-molecules and clusters (Chair: B. Sulik)**

10h25-10h50:

**H. Shiromaru**: Recurrent fluorescence of  $C_6$ -stored in an electrostatic ring

10h50-11h15:

**M. Simon**: measurement and simulation of MeV ion transmission through glass micro-capillaries

11h15-11h40:

**Z. Juhász**: Regularities and irregularities in the dynamics of guiding of ions through nano and microcapillary

11h40-14h00

**Lunch**

14h00-15h15

**Fundamental processes in ion-atom/molecule collisions (Chair: A. B. Voitkiv)**

14h00-14h25:

**J. -Y. Chesnel**:  $H^-$  formation via a binary encounter process in ion-molecule collisions

14h25-14h50:

**L. Liu**: Theoretical researches on the charge-transfer processes and the X-ray spectra for ions colliding with neutral atoms and molecules

14h50-15h15:

**L. Tribedi**: Electron emission from water molecules under impact of fast, bare O-ions

15h15-16h30    **Fundamental processes in ion-atom/molecule collisions**  
(Chair: **T. Kirchner**)

15h15-15h40:

**J. Walters**: Application of pseudostates to differential ionization

5h40-16h05:

**M. Trassinelli**: Symmetric heavy collision systems at low energy investigated by high resolution X-ray spectroscopy

16h05-16h30:

**R. T. Zhang**: Electron emission in the transfer ionization of  $\text{He}^{2+}$  collisions with argon

16h30-16h45    **Closing speech (Chair: J G Wang)**

16h45-18h00    **Poster session**

18h00            **Conference dinner**

### **Monday July 22<sup>nd</sup>, 2013: Local tours**

8:00am tour to LT1: **The Forbidden City, Temple of Heaven**

7:00am tour to LT2: **The Great Wall, Ming Tombs and Olympic Green**

8:30am tour to LT1: **The Summer Palace, Winter Palace**