# Program of the 3<sup>rd</sup> Wiii in Narita, Sep. 4-5, 2010 www.riken.jp/ap/conf/wiii2010/

\*The standard length of each talk is 30 min including discussion although some talks will be 20 min, which are shown by \* at the end of the title.

# September 4 (Saturday): Low Energy Ions

10:30-10:40 Welcome

### 10:40-12:40 Slow HCI + single capillary

Simulation of guiding through macroscopic capillaries	C. Lemmell
The new model of double-guiding of ions by flat capillary	G. Pokhil
Irradiation of slow highly charged ions to glass surfaces (tentative)	T. Ikeda

Ion beam guiding with bent Teflon tubes

# T. M. Kojima

#### 12:40-13:40 lunch

## 13:40-15:40 Slow HCI + multicapillary

Controlling the guiding properties of mesoscopic glass capillaries for slow	F. Aumayr
highly charged ions	
High and low energy HCI transmission through glass capillaries	A. Cassimi
Energy and time dependence of electron transmission in macrocapillaries	J. Tanis
Molecular Imaging Technique with swift heavy ions	J. Matuo

## 15:40-16:10 coffee break

## 16:10-17:40 Slow HCI + multicapillary

Dynamics of ion guiding through nano-capillaries	R. Schuch
Dynamics of ion guiding through nanocapillaries in insulating PET and PC	N. Stolterfoht
polymers	
Time evolution of ion guiding and formation of neutrals in polymer	Z. Juhasz
nanocapillaries	

18:30- Banquet

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## September 5 (Sunday): High Energy Ions

#### 9:00-10:30 MeV application to biological science

First results from micro-irradiation of living cells by tapered glass capillaries W. Meissl Effect of proton beam irradiation through thin capillary on motility and cell M. Kato growth of Escherichia coli.

Irradiation of living medaka embryo by proton beams through a glass K. Maruyama capillary: preliminary data\*

#### 10:30-11:00 coffee break

#### 11:00-12:30 Application to material science

Ion irradiation effects on polymer at solid-liquid interface

Application of glass and metal capillaries to an N ion beam at 6 MeV\*

Transmission Property of a Glass and a Metal Capillaries for MeV Proton and Alpha Particles

T. Kobayashi

K. Fukutani

N. Fujita

#### 12:30-13:30 lunch

#### 13:30-15:30 Ion-Insulator Interactions

Dynamic processes in isolated nano-systems

Secondary electron emission during grazing scattering of MeV HeH<sup>+</sup> ions from KCl(001)

A study of the interactions between low energy ion / neutral beams and MgO(001)\*

K. Kimura

K. Umezawa

Morphological change of fluoropolymer surface by ion beam irradiation\* A. Kitamura

## 15:30-16:00 coffee break

## 16:00-17:30 New Beam with capillaries and summary

Muon beam density enhancement with tapered tubes

D. Tomono
Biological irradiation with laser microbeam using tapered glass capillary:
propagation of laser beam

T. Sekiguchi

Summary F. Aumayr

#### 18:00-20:00 dinner

(Long-range effects under low energy ion irradiation of layered insulators: (V.I. Dubinko) Experiment and the model)