## Programme

## Tuesday 10<sup>th</sup> April

9:00-13:00 Overview of research programmes in China and France

Chairperson: Patricia Roussel-Chomaz

Welcome address: GANIL and Spiral2, present status and prospects

Navin Alahari (GANIL, Caen)

Prospect of nuclear research centre in Huizhou China

Wenlong Zhan (CAS, Beijing)

Introduction to the China institute of atomic energy

Yanlin Ye (PKU, Beijing)

**Nuclear physics activity at SINAP** 

Yugang Ma (SINAP-CAS, Shanghai)

Coffee break: 15 minutes

Chairperson: Wen-Qing Shen

Fundamental nuclear physics at CNRS/IN2P3

Fanny Farget (CNRS/IN2P3, Paris)

Fundamental nuclear physics at CEA

Nicolas Alamanos (CEA/DRF/IRFU, Saclay)

European research framework in nuclear physics

Marek Lewitowicz (NUPECC and GANIL, Caen)

Lunch

14:30 - 16:00 Visit of GANIL and Spiral2

#### 16:30 - 18:10

Chairperson: Marek Ploszajczak

#### Simplicity exhibited by complex nuclear structure

Yumin Zhao (SJTU, Shanghai)

#### **Theoretical Nuclear Structure Physics in France**

Vittorio Somà (Irfu/DPhN, Saclay)

#### **Nuclear resonances by ab-initio investigations**

Furong Xu (PKU, Beijing)

# Dynamics of irradiation: from molecules to nano-objects and from material science to biology

Eric SURAUD, LPT/IRSAMC, Toulouse

#### 19:00 Cocktail dinner

**GANIL** guesthouse

## Wednesday 11<sup>th</sup> April

#### 9:00 - 10:40

Chairperson: Wenlong Zhan

#### Researches on nuclear fission in France

Beatriz Jurado (CENBG, Bordeaux)

# Experimental research on heavy-ion induced fusion and fission reactions at near-barrier energy region

Huiming Jia (CIAE, Beijing)

#### Quantified Gamow Shell Model interaction for psd-shell nuclei

Yannen Jaganathen (GANIL, Caen)

#### Experimental research on the reactions and decays of exotic nuclei

Chengjian Lin (CIAE, Beijing)

Coffee break

#### 11:10 - 12:00

Chairperson: Fanny Farget

#### **Heavy ion cancer therapy in China**

Guoqing Xiao (IMP-CAS, Lanzhou)

#### Hadron therapy and radioisotope production in France

David Brasse (IPHC, Strasbourg)

#### 14:00 – 16:00 Visit of Archade, hadrontherapy facility

Coffee break

#### 15:30 - 17:10

Chairperson: David Boilley

#### **Experimental Nuclear Structure Physics at GANIL**

Emmanuel Clément (GANIL, Caen)

#### Nuclear clustering in light neutron-rich nuclei

Yanlin Ye (PKU, Beijing)

### Clustering effects in reactions with light even-even N=Z nuclei

Luca Morelli, (GANIL, Caen)

#### Robustness of the N=34 shell closure: First spectroscopy of 52Ar

Hongna Liu (CEA/DRF/IRFU, Saclay)

#### **Thursday 12th April**

#### 9:00 - 10:40

Chairperson: Frédéric Chautard

#### Accelerators R&D in France

Jean-Luc Biarrotte (IN2P3)

#### High intensity ion beam production and acceleration at IMP

Hongwei Zhao (IMP-CAS, Lanzhou)

#### **R&D** on ECR sources and injectors in France

Jérôme Schwindling (CEA/DRF/IRFU, Saclay)

#### Development of high power superconducting linacs at IMP

Yuan He (IMP-CAS, Lanzhou)

Coffee break

#### 11:00 - 13:00

Chairperson: Chengjian Lin

#### **R&D** on charged particles detectors

Freddy FLAVIGNY (IPNO, Orsay)

#### Status and challenge of HIAF project

Jiancheng Yang (IMP-CAS, Lanzhou)

#### Gamma-ray detectors in France

Christophe Theisen (CEA/DRF/IRFU, Saclay)

#### Physics Opportunities at the New Facility HIAF

Xiaohong Zhou (IMP-CAS, Lanzhou)

#### **NFS** facility

Xavier Ledoux (GANIL, Caen)

Lunch

#### 14:30 - 16:35

Chairperson: Yu-Gang Ma

#### Research on Nuclear Dynamics and Equation of State

Olivier Lopez (LPC, Caen)

#### Penta-quark states with strangeness, charm and beauty

Bingsong Zou (ITP-CAS, Beijing)

#### Phase transition dynamics for hot nuclei and N/Z influence

Bernard Borderie (IPNO, Orsay)

#### FAZIA/INDRA@GANIL: data for nuclear matter equation of state

Rémi Bougault (LPC, Caen)

#### Extreme exotism in lanthanides: achievements and open questions

Costel Petrache, CSNSM, Orsay

Coffee break

#### 16:50 - 18:30

Chairperson: Yanlin Ye

#### **DESIR** and Low energy nuclear structure physics

Jean-Charles Thomas (GANIL, Caen)

# Mass measurements of short-lived nuclides at the heavy-ion storage ring in Lanzhou

Yuhu Zhang (IMP-CAS, Lanzhou)

#### **Nuclear astrophysics in France**

Beyhan Bastin (GANIL, Caen)

#### **Nuclear astrophysics at IMP**

Xiaodong Tang (IMP-CAS, Lanzhou)

#### 20:00 Banquet

## Friday 13<sup>th</sup> April

9:00 - 10:40

Chairperson: Hongwei Zhao

#### **Research on SHE in France and S3**

Dieter Ackermann (GANIL, Caen)

Systematic calculations on alpha-decay half-lives of heavy and superheavy nuclei Zhongzhou Ren (TJU, Shanghai)

#### Synthesis of super-heavy elements and fusion hindrance

David Boilley (GANIL and Normandie Université, Caen), Caiwan Shen (Huzhou University, Huzhou)

**Production of heavy neutron rich nuclei in multi-nucleon transfer reactions** Feng-Shou Zhang (BNU, Beijing)

10:45 – 12:00 Wrap-up discussions and future collaborations

Chairpersons: Feng-Shou Zhang and Marek Lewitowicz

Farewell cocktail

13:30 Excursion to Mont Saint Michel