

# **Minutes of the IUPAP WG.9 Annual General Meeting on June 14-15, 2022**

## **Participating (in Washington or via Zoom):**

Angela Bracco – Chair IUPAP WG.9, University of Milano/INFN-Milano, Italy  
Robert E. Tribble – Past-Chair IUPAP WG.9, Brookhaven National Laboratory (BNL), NY, USA and Texas A&M University, College Station, TX USA  
Willem T. H. van Oers – (past Executive) Secretary, TRIUMF, BC, Canada  
Iris Dillmann -(Executive) Secretary, TRIUMF, BC, Canada  
Ani Aprahamian, chair of C12, University Notre Dame, IN, USA  
Patricia Chomaz– Director GANIL, France  
Faical Azaiez – Director iThemba Laboratories, South-Africa  
Fabio Bossi – Director Laboratori Nazionali Frascati, Italy  
Gail Dodge – Chair NSAC, Old Dominion University, USA  
Sean Freeman - ISOLDE CERN, Switzerland  
Haiyan Gao – Associate-Director Brookhaven National Laboratory (BNL), NY, USA  
Paolo Giubellino – Scientific Director FAIR/GSI, Germany  
Thomas Glasmacher – Director FRIB, MI, USA  
Stuart Henderson – Director Jefferson Laboratory, VA, USA  
Kevin Hahn (online to replace Kwon Myeon – Director RISP/IBS, Republic of Korea)  
Alinka Lepine-Szily - Co-Chair ALAFNA. Universidade de Sao Paulo, Brazil  
Marek Lewitowicz – Chair NuPECC, GANIL, France  
Weiping Liu – Chair ANPhA, CIAE-Beijing, China  
Hiroyoshi Sakurai – Director RIKEN Nishina Center for Accelerator Based Science, Japan  
Naohito Saito – Director Institute for Particle and Nuclear Studies (IPNS), KEK, Japan  
Hushan Xu – Director IMP-Lanzhou, China

## **Non-Participating/Regrets :**

Jeter Hall – Director of Research SNOLAB, ON. Canada  
Dinakar Kanjilal – Director Inter-University Accelerator Centre, India  
Nigel J. T. Smith – Executive Director/ CEO TRIUMF, BC, Canada  
Kazuhiro Tanaka – Past-Chair ANPhA, KEK, Japan

## **Members of IUPAP C12 participating as observers:**

Ani Aprahamian (U of Notre Dame, Chair C12)  
Iris Dillmann (TRIUMF)  
Diego Bettoni (INFN)

## **Invited Participants:**

Ritaparna Kanungo, Saint Mary's University & TRIUMF, Canada

Barbara Caccianiga, INFN-Milano, Italy

Erica Caden, SNOLAB, Canada

Tanja Horn, Jlab, USA

Hendrik Schatz, Michigan State University, USA

Jonathan D. Burns, University of Alabama at Birmingham, USA

Silvia Niccolai, Institut de Physique Nucleaire, Orsay, France

Takashi Nakano, Osaka University, Japan

Jordy de Vries, National Institute for Subatomic Physics, USA

Renee Fatemi, University of Kentucky, USA

Jonathan L. Feng, University of California at Irvine, USA

Shannon Bragg-Sitton, Idaho National Laboratory, USA

Sissy Koerner, scientific secretary of NuPECC

## **Funding Agency/Government representatives:**

CNRS/IN2P3 France – Marcella Grasso

INFN, Italy – Diego Bettoni

DoE, USA – Timothy Hallman

DoE, USA – Latifa Elouadrhiri

DoE, USA - Michael Famiano

NRF, South-Africa – Clifford Nxomani

NSFC, China - Wencong Li

## **Introduction**

- Words of welcome by the Chair Angela Bracco.
- Adoption of the Minutes of the previous AGM which took place online, June 10-11-12, 2021.
- Scientific secretary Willem van Oers stepped down as scientific secretary of the Chair of IUPAP WG.9. He was the original scientific secretary starting in 2003 and the official appointment of this role occurred in 2005 when IUPAP recognized WG9 as one of its Working Groups. It is thanks to his great dedication and continuous attention that WG9 has obtained its high international recognition. All members of WG9 heartily thank him for his invaluable work.  
Iris Dillmann from TRIUMF is nominated as new scientific secretary. She was warmly welcomed by all participants in this meeting. Iris Dillmann started this duty a few months ago and she has already worked on the re-styling on the WG9 webpage and in the preparation of this meeting.
- Membership changes

- Navin Alahari has stepped down as director of GANIL and is replaced by Patricia Chomaz as director and is serving on IUPAP WG.9.
- Gerda Neyens has stepped down as group leader of CERN-ISOLDE and is replaced by Sean John Freeman who is serving on IUPAP WG.9.

The Chair Angela Bracco on behalf of the WG9 members expressed thanks to all who have served and are leaving IUPAP WG.9 and welcomed the new members to proceed in the mandate given to IUPAP WG.9.

## **The next IUPAP WG.9 Annual General Meeting**

The IUPAP Nuclear Science Symposia are biennial events and thus the next one is scheduled for 2024. In 2023 we plan to hold the IUPAP WG.9 Annual General Meeting in France in connection with the fourth International Conference on Advances in Radioactive Isotope Science (ARIS) taking place in Avignon, France on 4-9 June 2023.

## **IUPAP Report 41**

The Report gives a worldwide perspective of research and research facilities in Nuclear Science.

The Introduction to the Report outlines the key physics issues that have led to the nuclear science facilities existing or being planned:

- The nuclear physics as studied from its beginning; nuclear structure and nuclear reactions, the formation of the elements throughout the universe including the super-heavy elements.
- The structure of the nucleon consisting of quarks and gluons within the Standard Model.
- Fundamental symmetries leading to physics beyond the Standard Model and with the study of neutrino properties through neutrino-less double beta-decay and neutrino oscillations.
- Nuclear energy in the era of climate change and global warming.
- Applications of nuclear physics to the benefit of society, e.g. as in nuclear medicine.

The Report provides a brief description of the nuclear facilities that have an acknowledged User Organization. The Report is being considerably revised and updated over the years and most of the material to update the description of the facilities has been collected. In the next months the editing of the new material will be completed.

As in the past editions, the symposium of this year also covered very well the topics of Report 41 listed above. Interesting updates were presented followed by fruitful discussions.

## **The in-camera meetings**

Tim Hallman, the DOE office of Science Associate Director for Nuclear Physics, convened two ad-hoc lunch meetings on the margins of the IUPAP WG9 meeting for stakeholders and other

interested parties to discuss the current status of efforts on ton-scale neutrinoless double beta decay experiments and the future Electron-Ion Collider. Steady progress is being made on both initiatives. Both meetings afforded productive information exchanges on the current state-of-play on the respective projects, as well as current and possible international participation. Hallman expressed his sincere appreciation for discussion by all who attended.

### **Long Range Planning Organization Reports**

Long range plan reports were presented for ALAFNA by Alinka Lepine-Szily (Universidade de Sao Paulo), for ANPhA by Weiping Liu (CIAE), for NSAC by Gail Dodge (Old Dominion University), and for NuPECC by Marek Lewitowicz (GANIL). In addition there were reports on long range planning of Nuclear Science in Africa by Rudolph Nchodu (iThemba Laboratories) and on KEK (Japan) by Naohito Saito. The meeting of C12 will be held in September 2022 during the INPC in Cape Town (12-17 September 2022).

### **Presentations at the Nuclear Science Symposium and IUPAP WG.9 Annual General Meeting**

The agenda of these two meetings and the links to the actual presentations are in:  
<https://meetings.triumf.ca/e/iupap-wg9-2022>

### **Acknowledgement**

On behalf of the members of IUPAP WG.9 and all others present at the two meetings thanks need to be expressed to the SURA as host of Nuclear Science Symposium and IUPAP WG.9 Annual General Meeting.

Iris Dillmann  
Executive Secretary IUPAP WG.9

Angela Bracco  
Chair IUPAP WG.9

Bob Tribble  
Past-chair IUPAP WG.9

June 28, 2022