

IUPAP Working Group 9 : Report to IUPAP C&CC Meeting, October 2019

This report essentially constitutes the Minutes of the Annual General Meeting held in 2019 at the University of Notre Dame London Global Gateway

IUPAP WG.9 Annual General Meeting held at the University of Notre Dame London Global Gateway, 1 – 4 Suffolk Street, London SW1Y 4HG, August 3, 2019

Present:

Robert E. Tribble – Chair IUPAP WG.9, Brookhaven National Laboratory, USA

Anthony W. Thomas – Past-Chair IUPAP WG.9, University of Adelaide, SA, Australia

Willem T. H. van Oers – Executive Secretary IUPAP WG.9, TRIUMF, BC, Canada

Navin Alahari – Director GANIL, France

Faical Azaiez - Director I'Themba Laboratories, South-Africa

Jonathan Bagger – Director TRIUMF, BC, Canada

Angela Bracco – Past-Chair NuPECC, INFN Milano, Italy

Hideto En'yo – Director RIKEN Nishina Center for Accelerator Based Science, Japan

Claes Fahlander – Chair IUPAP C12, Lunds Universitet, Sweden

Donald F. Geesaman – Past-Chair NSAC, Argonne National Laboratory, USA

Paolo Giubellino – Scientific Director FAIR/GSI, Germany

Thomas Glasmacher – Director FRIB, USA

David W. Hertzog – Chair NSAC, University of Washington, USA

Alinka Lepine-Szily – Co-Chair ALAFNA, Universidade de Sao Paulo, Brazil

Marek Lewitowicz – Chair NuPECC, GANIL, France

Gerda Neyens, CERN-ISOLDE, KU Leuven, Belgium

Naohito Saito – Director J-PARC, Japan

Nigel J. T. Smith – Director SNOLAB, Canada

Kazuhiro Tanaka – Chair ANPhA, KEK, Japan

Hushan Xu – Director IMP-Lanzhou, China

Regrets:

Stuart Henderson – Director Jefferson Laboratory, USA

Berndt Mueller – Associate-Director BNL, Brookhaven National Laboratory, USA

Absent:

Pierluigi Campana – Director Laboratori Nazionali di Frascati, Italy

Dinakar Kanjilal – Director Inter-University Accelerator Centre, India

Kwon Young Kwan – Director RISP/IBS, Korea

Victor A. Matveev, Director JINR Dubna, Russia

Dong-Pil Min – Past-Chair ANPhA, Seoul National University, Korea

Members of IUPAP C12 present as observers:

Ani Aprahamian, University of Notre Dame, USA

Maria J. G. Borge, CERN-ISOLDE, Switzerland

Iris Dillmann, TRIUMF, BC, Canada

Fanny Farget, CNRS/IN2P3, France

Eugenio Nappi, INFN-Bari, Italy

Joachim Stroth, Universitaet Frankfurt, Germany

Hirokazu Tamura, Tohuko University, Japan

Eberhard Widmann, Austrian Academy of Sciences, Austria

Rituparna Kanungo, St. Mary's University, Canada

And invited speakers of the Nuclear Science Symposium:

Vincenzo Cirigliano, Los Alamos National Laboratory, USA

Ian Harry, University of Portsmouth

Joshua Klein, University of Pennsylvania, USA

Richard G. Miller, MIT, USA

Guillaume Pignol, LPSC, Universite de Grenoble, France

Sanja K. Reddy, INT/University of Washington, USA

Martin Savage, University of Washington, USA

Marc Vanderhaeghen, Mainz Universitaet, Germany

Funding Agency/Government representatives:

CFI, Canada – Mohammad Nasser-Eddine

CNRS/IN2P3 France – Fanny Farget

CEA France – Franck Sabatie

INFN, Italy – Eugenio Nappi

DoE, USA – Timothy Hallman

DoE, USA – Jehanne Gillo

RIKEN, Japan – Toshiyasu Ichioka

NRF, South-Africa – Molapo Qhobela

STFC, UK – Mark Thomson

Discussion points:

IUPAP Report 41:

Following the 2017 Nuclear Science Symposium held at the RIKEN Tokyo Office on August 29-30, the updated IUPAP Report 41 was posted on the IUPAP WG.9 website on February 28, 2018. It contains an Executive Summary followed by comprehensive descriptions of the topics - 'Nuclear Structure, Nuclear Reactions, and Nuclear Astrophysics', 'Hadronic Nuclear Physics', 'QCD and Quark Matter', 'Fundamental Symmetries', 'Applied Nuclear Sciences', 'Nuclear

Power', and 'Future Nuclear Physics Facilities around the World'. It is the intention to augment these descriptions with the written versions of the nine presentations of the 2019 Nuclear Science Symposium held at the University of Notre Dame London Global Gateway on the topics deemed at the forefront of current Nuclear Science. These written versions will also be published in the scientific literature, precise details still to be defined.

Updated versions of descriptions of individual nuclear physics laboratories were also posted. The requirement is for these nuclear physics laboratories to have a well defined Users Group of affiliated nuclear scientists. The various nuclear physics laboratories are arranged by region and in the future also in the large nuclear physics national laboratories and smaller ones of more local interest. It appears to be a rather cumbersome task to receive up-to-date descriptions after many requests; some individual nuclear physics laboratory entries are still missing.

Note that IUPAP Report 41 also contains an addendum (IUPAP Report 41a) with a description of the large Deep Underground Research Facilities worldwide.

Current Membership of IUPAP WG.9:

Representation of CERN-Nuclear-Science has been established and Gerda Neyens of CERN-ISOLDE and the Katolieke Universiteit Leuven [1425] is the current representative.

The IUPAP WG.9 membership lists Dinakar Kanjilal , director of the Inter-University Accelerator Centre (IUAC), New-Delhi, India as the representative from India. Regrettably the Indian Government does not provide funds for this type of travel and IUPAP has only very restricted funds available. This then provides a problem in having appropriate representation from India. Note that Dinakar Kanjilal has retired and is replaced by Avinash C. Pandey. At the Nuclear Physics Division of the Bhabha Atomic Research Center (BARC), Mumbai, the current head is B. K. Nayak and the Acting Director of the Variable Energy Cyclotron Centre (VECC), Kolkata, is Sumit Som. It has been suggested to follow a more direct approach resolving the question of representation from India.

A question arose about the representation from Korea.: Kwan Young Kwan was the interim director of RAON/RISP; he has been replaced by Myeun Kwon as of January 1, this year. However, Myeun Kwon is not a nuclear physicist and would like to delegate his position serving on IUPAP WG.9 to a nuclear physicist.

The Nuclear Science Symposia have several 'in-Camera' meetings of Funding Agency/Government representatives. There were two themes for these 'in-Camera' meetings at the London Global Gateway: "Electron Ion Collider" and "Ton-Scale Neutrino-less Double Beta Decay Experiments". Proper representation from China was missing. There are several distinct funding agencies for nuclear science in China. Hushan Xu, director of IMP-Lanzhou, intends to be an intermediary to resolve this issue.

IUPAP WG.9 EXECUTIVE:

At the beginning of this year Robert. E. Tribble indicated his wish to stand down as the Chair of IUPAP WG.9. The Past-Chair Anthony W. Thomas was asked to solicit nominations for a member of IUPAP WG.9 to succeed as the Chair. The nomination brought forward at the Annual General Meeting was Angela Bracco of INFN-Milano, Past-Chair of NuPECC. This nomination was unanimously endorsed by the membership of IUPAP WG.9 at the London Global Gateway meeting. As of January 1, 2020, the Executive of IUPAP WG.9 will then consist of Angela Bracco – Chair, Robert E. Tribble – Past-Chair, Willem T. H. van Oers – (Executive) Secretary.

Anthony W. Thomas will step down as the Past-Chair on January 1, 2020. To note that he has served as the Chair of IUPAP WG.9 for nine years after its launching as an ad-hoc committee within C12 in 2003 and official recognition as one of the Working Groups of IUPAP in 2005. What has become of the Working Group and its international recognition started from the time with him as Chair (2003 – 2011).

Report from the 'in-Camera' meetings by the Chair Timothy J. Hallman, Chair:

Science topics for discussion are noted above. Elucidation of the modus operandi for research funding at the various national funding agencies was very helpful. It was concluded that discussion meetings at time intervals of about eight months would be most appropriate. The Nuclear Science Symposia should continue to occur at the current rate of once every two years.

The 2020 IUPAP WG.9 Annual General Meeting:

If the two meetings: the IUPAP C12 AGM and the IUPAP WG.9 AGM are to be held successively then the appropriate time window is about June 10 to September 10, 2020. Going over the sequence of meetings of IUPAP WG.9 the more preferred venue would be a North-American site. With the current membership of IUPAP C12 slanted towards nuclear structure, it is difficult to find a conference or symposium among those presently scheduled at a site close to a large international airport meeting the restricted travel times of the various members of IUPAP WG.9. A solution needs to be found within the next few months.

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

The agenda of these two meetings are posted separately and contain the links to the actual presentations : www.triumf.info/hosted/iupap/icnp/index.html

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 University of Notre Dame for acting as host for the various meetings organized by IUPAP WG.9 at the University of Notre Dame London Global Gateway.

Willem T.H. van Oers

(Executive) Secretary IUPAP WG.9

TRIUMF, August 14, 2019