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 Glaasmacher – Director FRIB, USA
David W. Hertzog – Chair NSAC, University of Washington, USA
Alinka Lepine-Szily – Co-Chair ALAFA, 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, Tohoku 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 Leaven [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), Mumba, 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 prefered 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 seperately and contain the links to the actual presentations: [www.triumf.info/hosted/iupap/icnp/index.html](http://www.triumf.info/hosted/iupap/icnp/index.html)

Acknowledgement:
On behalf ot 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