IUPAP WG.9 Symposium on Nuclear Physics and Nuclear Physics Facilities

The major activity of WG.9 in 2010 was a Two-Day Symposium on Nuclear Physics and Nuclear Physics Facilities worldwide, which was held at TRIUMF in Vancouver, BC, on July 2 – 3, 2010. The purpose of the Symposium was to provide a forum where the international proponents of nuclear science could be appraised of and discuss the present and future plans for nuclear physics research as well as the upgraded and new research facilities required to realize those plans. The Symposium was held as a response to the mandate given to the IUPAP Working Group (WG.9) on International Cooperation in Nuclear Physics by the OECD Global Science Forum in a missive from its Chair, Hermann-Friedrich Wagner, following the recent report of the OECD Global Science Forum Working Group on Nuclear Physics.

Three half-day presentations were organized each by NSAC (the US Nuclear Science Advisory Committee), by NuPECC (the Nuclear Physics European Collaboration Committee), and by ANPhA (the Asian Nuclear Physics Association).

The presentations focused on the main themes of nuclear physics today:

i) Can the structure and interactions of hadrons be understood in terms of QCD? ; ii) What is the structure of nuclear matter? ; iii) What are the phases of nuclear matter? ; iv) What is the role of nuclei in shaping the evolution of the universe, with the known forms of matter only comprising a meager 5%? ; v) Which is the physics beyond the Standard Model? . The presentations led to extensive discussions among the various representatives. The final half day, following a synopsis of the presentations and discussions by Robert E. Tribble of Texas A&M University, saw first a panel discussion by the three nuclear physics groups mentioned above and next a series of statements by science administrators (DoE, Office of Science Nuclear Physics, NSF Nuclear Physics, INFN Third Commission, IN2P3/CNRS, CEA/Service de Physique Nucleaire. the Japan Ministry of Education, Science, and Technology, the Korea Research Council, and the China Institute of Atomic Energy).

The Symposium brought together, for the first time, nuclear physics researchers, Laboratory Directors, and Nuclear Science Administrators in a worldwide setting. It showed a vigorous field of nuclear physics with demanding forefront challenges and large nuclear physics facilities being upgraded or coming on line presently or in the near future (CEBAF 12 GeV at Jefferson Laboratory, the FRIB at MSU, SPIRAL2 at GANIL, ISAC at TRIUMF, RIKEN Nishina Center, J-PARC, FAIR at GSI, upgraded RHIC at BNL, and in the more distant future EURISOL). IUPAP WG.9 has given great encouragement to efforts aimed at strengthening regional and international nuclear physics cooperation. At the Symposium the nuclear physics community was informed of the formation of a Latin America Nuclear Physics Association (ALAFNA) to strengthen nuclear physics in Latin-America. Similar attempts may be undertaken in Africa.

Further details may be found going to the website www.iupap.org under ‘Working Groups’ : WG.9 with its website.

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