Gravitational Wave International Committee (WG11) report to IUPAP

19 September 2012

(prepared by Stan Whitcomb, Caltech [Secretary] and Eugenio Coccia, University of Rome "Tor Vergata" [Chair])

The Gravitational Wave International Committee (GWIC) was formed in 1997 to facilitate international collaboration and cooperation in the construction, operation and use of the major gravitational wave detection facilities world-wide. The membership of GWIC represents all of the world's active gravitational wave projects, as well as other relevant communities, covering gravitational wave frequencies from nanohertz to kilohertz. Each project has either one or two members on GWIC depending on size. Because the GWIC representatives are generally the leaders of each project, GWIC has access to broad expertise from throughout the community. Since its founding GWIC has included representation from the International Society on General Relativity and Gravitation and from the astrophysics/theoretical relativity community. GWIC meets annually adjacent to an appropriate conference, with recent meetings in Rome (2012), Cardiff (2011), Hannover (2010), Pasadena (2009), New York City (2009), and Pisa (2008).

GWIC Activities in 2011-2012

In late 2011, GWIC was accepted by IUPAP as a Working Group (WG11). This was judged to be possible without any change to the remit or the by-laws of GWIC. GWIC agreed to accept representation from interested IUPAP commissions and working groups, and to provide cross-representation for APPIC (WG10) and to other IUPAP commissions as requested. At its 2012 meeting, GWIC discussed its representation on AC2 and AC2's representation on GWIC, and these ideas have been shared with AC2. Similar conversations will be held with C19.

GWIC heard with great interest the progress which has been made in India toward planning a large gravitational wave detector there in collaboration with the LIGO Laboratory. The project has cleared the preliminary funding hurdles, and is awaiting a final agreement between the Indian and US governments. GWIC authorized the Chair to add a second representative to GWIC from India (to bring it to parity with the other large projects in GWIC) once the project is fully approved.

GWIC convenes the biennial Edoardo Amaldi Conferences on Gravitational Waves, sponsored by IUPAP as a "class B" Conference. The Amaldi meeting is considered by many in the gravitational wave community to be their most important international gathering. The members of GWIC serve as the Scientific Organizing Committee for the Amaldi meetings. Amaldi-10 meeting will be held in conjunction with AC2's 20th International Conference on General Relativity (GR20) in Warsaw, 7- 13 July 2013.

GWIC approved the topics for invited talks at its September 2012 meeting, and will continue the approval process for speakers via email.

Since 2006, GWIC has awarded an annual international prize for an outstanding Ph. D. thesis based on research in gravitational waves. The 2012 GWIC Thesis Prize was awarded to Rutger van Haasteren from the University of Leiden, and was presented to him at the LISA Symposium in Paris. There were 17 theses nominated this year, equaling the record number from the previous year. Rutger's thesis marks the first winner from the pulsar timing community and is a sign that they have fully integrated into GWIC. The Netherlands is the fifth country represented among the winners in the six years since the prize was established. Finally, GWIC continued its agreement with Springer, to nominate the winner of the GWIC Thesis Prize for publication in the Springer Thesis Series. Springer has accepted Rutger's thesis for publication this year.

In early 2012, GWIC agreed to a request from several members of the community to host information and links to publicly available simulation tools for gravitational wave detector modeling on a project-neutral webpage. Making these tools more easily accessed will reduce duplication of effort in the community. This webpage was been set up in 2012 and is functioning.

Membership of GWIC (as of September 2012)

Chair: Eugenio Coccia
ACIGA: Jesper Munch
AURIGA: Massimo Cerdonio
Einstein Telescope: Michele Punturo
EXPLORER/NAUTILUS: Eugenio Coccia
European Pulsar Timing Array (EPTA): Michael Kramer
GEO 600: Karsten Danzmann, Sheila Rowan
IndIGO: Bala Iyer
LIGO, including the LSC: Gabriela Gonzalez, David Reitze
LISA: Bernard Schutz, Robin Stebbins, Stefano Vitale
NANOGrav: Maura McLaughlin
Parkes Pulsar Timing Array (PPTA): Dick Manchester
Spherical Acoustic Detectors: Odylio D. Aguiar
TAMA/CLIO/LCGT: Takaaki Kajita, Seiji Kawamura
VIRGO: Francesco Fidecaro, Jean-Yves Vinet
Theory Community: Clifford Will
Executive Secretary: Stan Whitcomb