

Gravitational Wave International Committee (WG.11) report to IUPAP

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(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. From 1999 until 2011, GWIC was recognized as a subpanel of PaNAGIC (IUPAP WG.4). In 2011, GWIC was accepted by IUPAP as a separate Working Group (WG.11). This was judged to be possible without any change to the remit or the by-laws of GWIC. Since its founding, GWIC has included representation from the International Society on General Relativity and Gravitation (AC2) and from the astrophysics/theoretical relativity community. GWIC agreed to accept representation from other interested IUPAP commissions and working groups, and to provide cross-representation for APPIC (WG10) and to other IUPAP commissions as requested.

GWIC meets annually adjacent to an appropriate conference, with recent meetings in Warsaw (2013), Rome (2012), Cardiff (2011), Hannover (2010), Pasadena (2009), New York City (2009), and Pisa (2008). Other business during the year is conducted via email or other electronic communication.

GWIC maintains a website at <https://gwic.ligo.org/> which contains an up-to-date listing of members, its by-laws, announcements of its activities, and links to other items of interest to the gravitational wave community.

GWIC Membership

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. GWIC also includes representatives from ISGRG (IUPAP AC2) and from the astrophysics/theoretical relativity community.

Each member project in GWIC determines its representatives on GWIC. In this year, five member projects appointed new representatives: ACIGA (Peter Veitch), KAGRA (Yoshio Saito), LISA (Neil Cornish), NANOGrav (Rick Jenet), and PPTA (George Hobbs). In addition, Beverly Berger was appointed by AC2 as its representative.

The GWIC Chair is elected by its membership at its annual meeting in odd years. In 2013, GWIC chose Eugenio Coccia for a second term as GWIC Chair, serving until 2015. The GWIC Chair appoints the Executive Secretary, and Eugenio continued Stan Whitcomb in this position.

GWIC Activities in 2012-2013

GWIC received a report on the status of the proposal in India to build a large gravitational wave detector there in collaboration with the LIGO Laboratory. The project has been included in the five-year plan for Indian science, and is awaiting final agreement between the Indian and US governments.

GWIC convenes the biennial Edoardo Amaldi Conference 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. This year, the tenth Amaldi meeting was 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 approved the plenary and invited speakers via email during the year.

A major decision at the 2013 GWIC meeting was the selection of a venue and local organizing group for the 2015 Amaldi meeting. Four groups presented proposals to host the 2015 Amaldi meeting, in Adelaide (Australia), Budapest (Hungary), Gwangju (Korea), and Minneapolis (USA). All proposals were judged to be excellent. Gwangju was selected, marking the first time that the Amaldi meeting will be held in Korea, and only the second time in Asia.

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 Paul Fulda from the University of Birmingham, and was presented to him at the Amaldi-10 meeting in Warsaw. There were 11 theses nominated this year, from five different countries. Paul is the first winner from the UK, making it the sixth country represented among the winners in the seven years since the prize was established. 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 Paul's thesis for publication this year.

At its meeting in Warsaw, Eugenio brought up the issue of the Stefano Braccini Thesis Prize. In 2011, an informal group (the Friends of Stefano Braccini) created a separate thesis prize, to honor Stefano, a talented young physicist who had worked with the Virgo project. The assessment of GWIC was that the growth in the field of gravitational waves, as evidenced by the number and quality of the theses nominated for the two prizes, could justify two annual prizes. It was decided, together with the Friends of Stefano Braccini, that the two prizes be announced through a single call for nomination and that the selection of both Prizes be made by a jointly appointed committee. Furthermore, it was proposed that the two prizes be distinguished by emphasizing the impact to the field for the GWIC Thesis prize and by emphasizing creativity and innovation for the Stefano Braccini Prize. This new arrangement will begin with the next call for nominations, for calendar year 2013.

Membership of GWIC (as of September 2013)

Chair: Eugenio Coccia

ACIGA: Peter Veitch

AURIGA: Massimo Cerdonio

Einstein Telescope: Michele Punturo

European Pulsar Timing Array (EPTA): Michael Kramer

GEO 600: Karsten Danzmann, Sheila Rowan

IndIGO: Bala Iyer

KAGRA: Takaaki Kajita, Yoshio Saito

LIGO, including the LSC: Gabriela Gonzalez, David Reitze

LISA: Neil Cornish, Bernard Schutz, Robin Stebbins, Stefano Vitale

NANOGrav: Frederick Jenet

NAUTILUS: Eugenio Coccia

Parkes Pulsar Timing Array (PPTA): George Hobbs

Spherical Acoustic Detectors: Odylio D. Aguiar

VIRGO: Francesco Fidecaro, Jean-Yves Vinet

Theory Community: Clifford Will

AC2 Representative: Beverly Berger

Executive Secretary: Stan Whitcomb