CERN LVC workshop roundtable (what's coming next?)

Sheila Rowan Chair, Gravitational Wave International Committee



What is GWIC (Gravitational Wave International Committee)?

Body formed in 1997 to facilitate international collaboration and cooperation in the construction, operation and use of the major gravitational wave detection facilities world-wide

- Affiliated with the International Union of Pure and Applied Physics
 - From 1999 until 2011, GWIC recognized as a subpanel of PaNAGIC (IUPAP WG.4).
 - In 2011, GWIC was accepted by IUPAP as a separate Working Group (WG.11).

Links to the:

International Astronomical Union (IAU) International Society for General Relativity and Gravitation (ISGRG)

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.

Current Chair: Sheila Rowan Executive Secretary: David Shoemaker, Co-secretary: Stan Whitcomb

Full membership and more information at: https://gwic.ligo.org/



*no CMB community membership

Who is GWIC?

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.

ACIGA Bram Slagmolen	NANOGrav Maura McLaughlin
Einstein Telescope Michele Punturo	Parkes Pulsar Timing Array George Hobbs
European Pulsar Timing Array Michael Kramer	Spherical Acoustic detectors Odylio Aguiar
GEO 600 Karsten Danzmann, Sheila Rowan	Theory Community Clifford Will
IndIGO Bala Iyer	Virgo Fulvio Ricci, Jo van den Brand
KAGRA Yoshio Saito, Takaaki Kajita	IUPAP AC2 (ISGRG) Beverly Berger
LIGO Dave Reitze, Gabriela Gonzalez	IAU D1 Marica Branchesi
LISA Neil Cornish, Bernard Schutz, Ira Thorpe, Stefano Vitale,	Executive secretary : David Shoemaker Co- secretary: Stan Whitcomb

GWIC 3G sub-committee

- 2009 GWIC formulated a roadmap with a 30 year horizon
- Foresaw:
 - essential to have a global network
 - upgrades to the Advanced detectors
 - a science case and technology pointing to future 3rd Generation GW observatories
 - GWIC is conscious of the relevance of the global approach to 3G matters
- A sub-committee has been formed to support this
 - Co-chairs:

Dave Reitze, Michele Punturo

Members:

- Federico Ferrini
- Takaaki Kajita
- Harald Lueck
- Jay Marx
- David McClelland
- Michele Punturo
- David Reitze
- Sheila Rowan

- EGO Director/interface to Virgo related organisations
- KAGRA Director
- interface to German agencies
- Big Project Expertise
- interface to Australian agencies
- ET Design Study Lead
- LIGO Director/interface to NSF
- GWIC Chair

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- D. Shoemaker (secretary)

V. Kalogera B. Sathyaprakash

Expertise in astrophysics/analysis

GWIC 3G sub-committee man digit chairs V. Kalogera,

"Examining the path to a future network of observatories / facilities

1) Science Drivers for 3G detectors:

commission a study of ground-based gravitational wave science from the global scientific community

2) Coordination of the Ground-based GW Community: develop and facilitate coordination mechanisms

3) Networking among Ground-based GW Community: organize and facilitate links between planned global 3G projects and other relevant scientific communities



- The subcommittee should provide a preliminary report and set of proposed actions recommendations to GWIC no later than the 2017 GWIC meeting.
- Subsequent reports should be delivered future GWIC meetings.

, speci^B. Sathyaprakash