
GWIC Roadmap → GWIC Overview

Gravitational wave detection at the Moon Workshop
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GWIC

- Gravitational-Wave International Committee
- Formed in 1997 to facilitate international collaboration and cooperation in the construction, operation and use of the major gravitational wave detection facilities world-wide.
- Associated with the [International Union of Pure and Applied Physics](#) as its Working Group WG.11.
- Membership is by 'Project', with a threshold of having some financial engagement by funding agencies
 - » In addition, have connections to some other related committees and to the Theory Community
- Ground-based interferometric detectors
- Pulsar Timing Arrays
- Space-based detectors
- The field is growing in all senses! Two domains that are evolving:
 - » High-frequency GWs
 - »Moon-based detectors

Current GWIC members: Pulsar-Timing Arrays, Ground- and space-based interferometers

- [LISA Community](#)
- [DECIGO](#)
- [European Pulsar Timing Array \(EPTA\)](#)
- [NANOGrav](#)
- [OzGrav](#)
- [GEO 600](#)
- [LIGO-India](#)
- [KAGRA](#)
- [LIGO](#)
- [Virgo](#)
- [Cosmic Explorer](#)
- [Einstein Telescope](#)
- Theory Community
- [IUPAP International Commission on General Relativity and Gravitation\)](#)
- [IAU Commission D1](#)

GWIC Activities

- Annual meeting (traditionally in person around another GW meeting)
 - » Assessment of progress
 - » Discussion of plans
 - » Invitation to bring challenges, ideas for discussion, e.g.,
 - IPTA
 - IGrav
 - GW-HF
- Meeting facilitation
 - » Sponsorship (Amaldi, LISA Symposium)
 - » Affiliation (GWADW, GWPAW)
- Roadmaps
 - » “3G” [study and white papers](#)
 - » Most recent: [Nature](#) – focus on Next-generation ground-based detectors

GWAC

- Interaction with [GWAC](#) – Gravitational Wave Agencies Correspondents
 - » Annual Zoomicon; review of GWIC Roadmap White Papers
- **Member Agencies**
 - » [Australian Research Council \(ARC\)](#)
 - » [Canada Foundation for Innovation \(CFI\)](#)
 - » [Centre National de la Recherche Scientifique \(CNRS\)](#)
 - » [Consejo Nacional de Ciencia y Tecnología \(CONACYT\)](#)
 - » [Deutsche Forschungsgemeinschaft \(DFG\)](#)
 - » [European Space Agency \(ESA\)](#)
 - » [Indian Department of Atomic Energy \(DAE\)](#)
 - » [Indian Department of Science and Technology \(DST\)](#)
 - » [Istituto Nazionale di Fisica Nucleare \(INFN\)](#)
 - » [National Aeronautics and Space Administration \(NASA\)](#)
 - » [National Science Foundation \(NSF\)](#)
 - » [Netherlands Organisation for Scientific Research \(NWO\)](#)
 - » [Research Foundation - Flanders \(FWO\)](#)
 - » [Science & Technology Facilities Council \(STFC\)](#)

GWIC on the Moon

- To be considered: A discussion of GW on the Moon at a GWIC meeting
 - » Talk about cool science and technology
 - » Raise awareness among GW Project Leaders
 - » Assess relationships to other endeavors
 - » Discuss meeting coordination, etc.
- To note: normally the next meeting would be in ~July 2022
 - » The unity-gain frequency is 1/year
 - » Is more rapid GWIC feedback needed for some reason?
- Questions/comments welcome!

