IIOJJVIRGD

IGWN

Gianluca Gemme

Virgo spokesperson





INTERNATIONAL GW NETWORK

- The International Gravitational Wave Network is a proposed single organization to coordinate the development, commissioning, and operations of the international network of groundbased, gravitational-wave detectors (L+V+K) and to carry out the scientific mission of that network
- The IGWN Design Committee is charged with developing a Charter (scope and purpose) and Bylaws for the organization
 - Secure individual groups contributions to detector-related activities
 - Sharing of financial resources and allocation of resources to IGWN activities
 - Avoid redundancies deriving from multiple venues where decisions are taken
 - Respect the specific needs and the necessary representativeness of regional realities
- IGWN Formation Committee: Virgo/EGO members
 - Gemme, Carpinelli, Barsuglia, Carbognani, Fafone, Freise, Martinez, Sordini, Van Den Broeck
- ➤ The committee is <u>not</u> charged with the creation of IGWN
 - Formation and approval process will be dealt with separately
- > Timeline: deliver a final recommendation by the end of the O4b run (with some flexibility)









IGWN MEETING IN VANCOUVER

- > Topics we touched with the agencies (NSF, ARC, CNRS, FWO, INFN, NWO-I, STFC):
 - Governance agency oversight/engagement is important
 - How do we include agencies' oversight, engagement?
 - How can we engage other countries/agencies?
 - IGWN member groups will be expected to contribute to instrumentation & operations
 - Sharing person-power and other resources through financial & in-kind contributions
 - IGWN will include a financial board and resource allocation board
 - What financial support model is possible to enable this?
 - Looking at existing successful role models for international scientific collaboration (e.g. HEP experiments), are there particular ones favored by the agencies?
 - R&D programs for enabling technologies are critically important to the field
 - Next steps we would like to be on the agencies' agenda:
 - IGWN formation
 - Engaging ET and CE







IGWN MEETING IN VANCOUVER: HOMEWORK

> How would IGWN handle the decision regarding Virgo upgrade/entry into 05?

How to get there:

- Plan A: install stable recycling cavities «whatever it takes»
- Plan B: install some upgrades and join 05 from the beginning (with reduced sensitivity) and postpone installation of stable cavities at a later moment

Stakeholders:

- Science
- Technical aspects (external review committee)
- L-K partners
- External communities
- Other stakeholders (funders)

Presentation at EGO Council in December 2024

Possible paths?







IGWN MEETING IN VANCOUVER: NEXT STEPS

➤ IGWN scientific program

- Responsibilities of groups and rights of members & setting up an LVK program committee (with guardrails)
- Set up an IGWN/LVK program committee: definition of scientific program and of mandatory contributions for instrument related activities (including operations) and service tasks for authorship
 - Definition of a common tool to track all collaboration related activities (including MoA reviews). List of activities based on LVK White Papers

Governance and charter

- Set up a "proto-IGWN" finance committee to respond to LVK budget changes
 - Proposed scope: costs over the next year (Gitlab moving to license, publications fees), long-term financial planning (e.g. computing needs), and risk assessment planning for anticipated and un-anticipated shifts (e.g. google docs)
 - Membership to be proposed after scope is mature
- Finalize and circulate the charter to the L-V-K for comments by mid-July

> Nex f2f meeting @ LVK meeting in Barcelona

> First draft of Bylaws: September LVK meeting in Barcelona ready for LVK comments