

Towards a Global VLBI Alliance

Paco Colomer (JIVE ERIC)

Why a Global VLBI Alliance?



- VLBI is a truly collaborative effort
- There are now several VLBI networks established and running
 - With their own characteristics, often offer *open skies*
 - Each is recognised under a unique brand: EVN, EAVN, VLBA, LBA, GMVA, LOFAR, EHT, IVS ...
- Often, VLBI networks cooperate, also observe together
- Some radio telescopes belong to more than one VLBI network
 - E.g. Chinese telescopes in EVN and EAVN, Eb(+Ar) in EVN and HSA, etc.
 - Also applicable to new instruments (e.g. Thailand 40m)
- It is found convenient to have a permanent forum
 - where the network representatives can meet
 - where the VLBI users can discuss and present their current issues and future needs
 - also as point of contact for collaboration with third-party instruments

Why a Global VLBI Alliance? (II)



- To **share information** in a timely and structured way between VLBI networks
 - Strategic developments (also to exploit *complementarity*)
 - Science vision
 - Technology paths
 - Proposal types, deadlines and evaluation
 - Logistics
 - Scheduling
 - And keep inventory of the developments
- For (non-expert) users and other stakeholders to have a clear and **visible entry/contact point** to the VLBI facilities
 - GVA web
 - Extended user support (also among networks)
 - Support to new facilities and groups (e.g. in Africa-AVN, Latin America-IVIA)
 - Education and outreach of VLBI
- Also to **coordinate joint observations** (but not only)
 - In particular with third parties (multi-messenger, SKA-VLBI)



GVA participant networks

- Very Long Baseline Array (VLBA, USA)
- European VLBI Network (EVN/JIVE)
- East Asian VLBI Network (EAVN)
- Long Baseline Array (LBA, Australia)
- Global mm-VLBI Array (GMVA) - observer

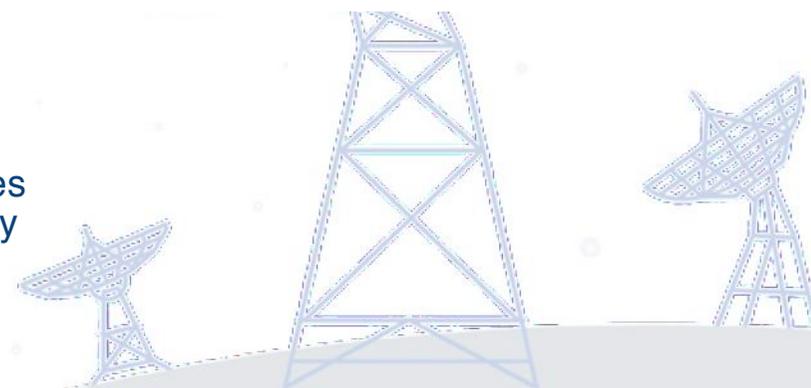
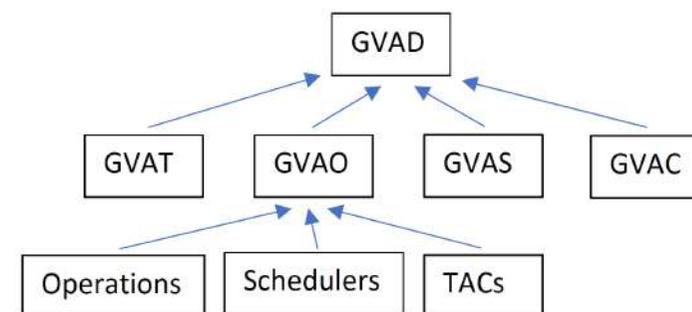


How to set a Global VLBI Alliance?



• GVA structure:

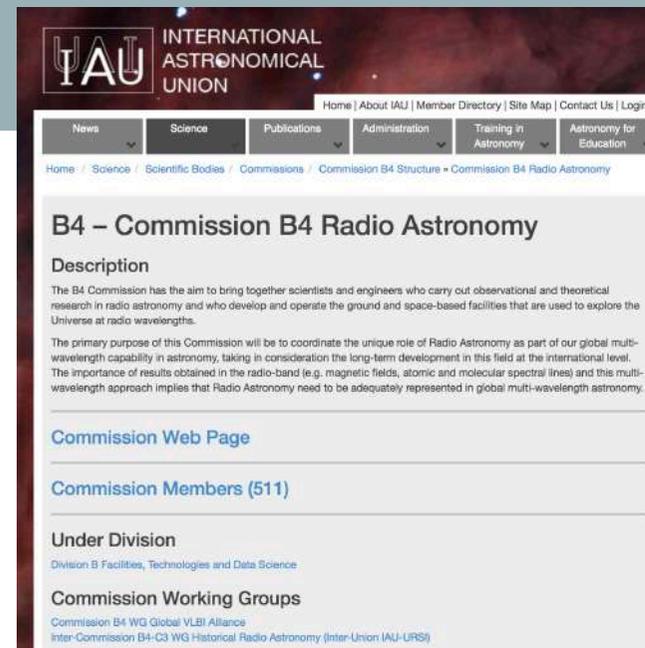
- GVA Director's Forum (GVAD): VLBI network directors or representatives, to discuss any aspect of the global cooperation. By invitation.
- Science Forum (GVAS): evaluates and fosters the unique and complementary contribution of VLBI to astrophysical research. Members are active scientists, not necessarily linked to any of the VLBI networks in the GVA.
- **Technical R&D Forum (GVAT): discusses opportunities and coordinates the development of new instrumentation or procedures, incorporating the global context.**
- Operations and Logistics Team (GVAO): facilitates and coordinates observations scheduled with several VLBI networks, or with participation of third-party instruments (e.g. multiwavelength/multimessenger). By invitation.
- Communication and outreach Team (GVAC): coordinates activities and tools to increase the scientific and societal impact of VLBI. By invitation.
- The GVAS, GVAT, GVAO and GVAC, all report to the GVAD.



Next steps

- GVA as a Working Group in IAU B4

https://www.iau.org/science/scientific_bodies/commissions/B4/



- Cross-participation of representatives of all VLBI networks in technical meetings
 - Standing invitation of EVN TOG chair to the meetings of the EAVN/VLBA/LBA/etc, and vice-versa.
 - Ensure awareness of the implementation of the EVN Technology Roadmap

Stay tuned! Check: <http://www.gvlbi.org/>



@globalvlbi