



Session B: international network and multi-messenger astronomy (short/medium term)

Laura Cadonati, Giovanni Losurdo

International Network:

resources and coordination: GWIC should interact with GWAC



- **Status post O1**

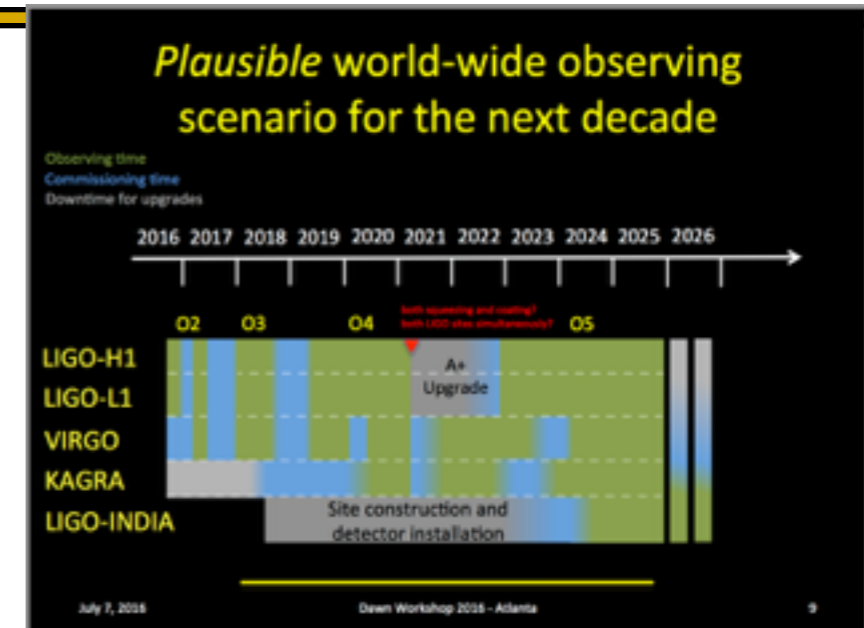
- Detection rate set by 2nd most sensitive detector, sky localization set by 3rd most sensitive detector (localization will improve with a 3rd detector at least 1/4 as sensitive as LLO/LHO)

- **Observing Scenarios:**

- Need a set of 3-4 metrics beyond V*T
- Improve the detector if possible, science as target

- **Panel: potential of a coordinated R&D program and role of GWAC**

- Framework: LIGO has solid plans for the A+ upgrades, Virgo has a “vision document”.
- LSC INS white paper is a good example of a coordinated R&D program. Can this be a model for a network program?
- What are the barriers to an international research effort?
- Main issue: resources. Achieving comparable sensitivities requires investments from the agencies. Neither coordination nor funding come without pushing.
- Possible short-term actions: fostering a more formal structure for coordination (steering committee or working group?)
- GWAC is operative and eager to receive inputs.
- Kagra interested in contribution for 3rd generation
- Can't only talk with each other - open LVC parallel sessions or reinvent GWADW to wider fields? (material science, geophysics...)



Multi-Messenger Astronomy:

public release of all triggers will result in greatest science



O1 WWaDNW

- EM partnership is succeeding - common interest in doing science.
- Forum did not work as well as hoped for
- Coordination of followups and skymaps

Panel: how should agreements be modified or the model for partnership changed?

- Agreement on importance of rapid communication of all information available:
 - first trigger with a “preliminary” flag (30 min or less)
 - revise false alarm threshold: be less conservative and allow for corrections in followup (even call back if needed)
 - sky maps, significance, distance
 - don’t hold back on NSNS events, nor on BBH (but communicate ID)
- there will be interest in MOUs for focused science targets/papers even in the era of open triggers
- request from NRAO director to be privy to discussions at the level of the LIGO-EM liaisons: should we offer this?