

OSB **Div9**

Scientific potential of different detector configurations, and common tools

@ 4th Einstein Telescope Annual Meeting

November 11, 2025



Michał Bejger (INFN Ferrara / CAMK Warsaw)

Michele Mancarella (Aix-Marseille Univ., CPT / CNRS)

Andrea Maselli (Gran Sasso Science Institute)

on behalf of OSB Div 9

<https://mail.ego-gw.it/mailman/listinfo/et-osb-tools>

<https://gitlab.et-gw.eu/div9/tools>

Current status & organisation

- We maintain tools for production of Figure Of Merits and forecasts.
- Work on site evaluation (ETO taskforce and others).
- Before summer: long debate about the nature of the division:
 - Some envision a “task force” rather than a “division”.
 - Some would maintain a division, but with strengthened and mandatory inter-division liaisons.
 - We do not see scope at the moment for structured projects (e.g. collaborative papers)
- Re-started monthly division calls in November.

Intra-division nature and activities

Current view and focus

- **Coordination and liaison across divisions as key priorities** (regardless of the structure of Division 9).
 - Div. 9 as a space open to organise such coordination (e.g. code review, shared projects).
 - Offer space for contributions (we do not want to have control on this).
- Use the division as a forum to **standardize and assess tools** for broader collaboration use with a global perspective, **integrating** software other than Fisher codes (e.g., Bayesian tools, waveform modeling, pop-synth...) in the list of tools usable by the wider ET community. **Need engagement to make this happen.**
- So far we haven't received inputs, we plan to directly invite contributions.

Intra-division nature and activities: plans

- **Survey and document available tools** (simulations, forecasts, waveforms) across divisions in synergy with them.
- Encourage and coordinate **code comparison/review practices** and discuss across divisions (e.g., "what is a common tool?", "how does my code become a common tool?")
 - Not as heavy as a full review yet, but some basic common checks to be assessed.
- Promote **presence in other divisions' meetings** to foster collaboration and harmonize software use, **and vice-versa**. Proactive contributions are important.

Intra-division nature and activities: plans

- Develop a procedure for **code evaluation and sharing**, possibly including standard rules, not as heavy as a full code review. In synergy with other divisions.
- Develop a **collector of tools used across divisions** with an efficient and rewarding procedure to make them known and usable. Occasion for development, networking and visibility rather than extra workload.
- All these require **proactive collaboration** from other divisions, especially software developers. We do not need to have the control, would like to be an open space.