



WG2-WG3 meeting Turku, June 8th 2022



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The last 2 years

- ❖ My last in person meeting with you was on September 2019 in Rijeka!
- ❖ After 2 years, maybe we could try to come back to standard life...at least for this summer...
- ❖ Things evolved anyhow, we had core and WG meetings, virtual workshop, Virtual mobility grant



Final Assessment (from COST-Action-Management-Monitoring-and-Final-Assessment)

4. COST ACTION MANAGEMENT, MONITORING AND FINAL ASSESSMENT COST

1. Actions shall be open to any participant relevant to the Action who shall be committed to **achieving the objectives laid out in the MoU**.
2. The Action activities shall be planned by the Action MC in compliance with the objectives, strategy, structure, and work plan presented in the MoU. They shall be reflected in the Work and Budget Plan (WB&P) annexed to the AGA. COST Action grants shall be devoted to the MoU implementation and respect the AGA conditions.
3. **The COST networking tools shall help in achieving the Action objectives**; all research and other activities needed to achieve those objectives shall be deemed to be funded by national or other source of funds.



WG2/WG3 objectives

1. Investigate new strategies for the handling/suppression of instrumental and environmental noise in current and next-generation detectors using Machine Learning techniques.
2. Investigate possible solutions to monitor the low-frequency Newtonian noise through the use of adaptive robots.
3. Bridge the gap between the disciplines of GW physics, geophysics, computer science and robotics by provision of the necessary common-ground conditions and language that will allow to tackle from different perspectives and approaches the challenging issues encountered in GW-related research.
4. Train a new generation of young scientists with broad skills in Machine Learning, GW, Control and Robotics.
5. Establish interaction with industry and external stakeholders since the beginning, for the activity of the Action which can have impact on the industry.



WG2/WG3 deliverables

1. Report on the monitoring of the seismic noise for GW detector and on its impact and impact on Newtonian Noise.
2. Report on Design study for application for robots to adaptively monitor seismic noise around GW detectors.
3. Report on solution to be adopted to address the impact of Newtonian Noise in GW data records.
4. Report on the application of ML methods in the control systems for GW detectors.
5. Report on new ML method applications in seismological problems for GW detection and related experiments.



COST monitoring

1. The main objective of the external monitoring shall be to provide an assessment on the progress of the COST Action with relation **to the implementation of networking activities, the development of S&T activities towards the Action's objectives and the putting into practice of the COST Policy.**

Which is the status for WG2/WG3?



Working group

- Please do a careful check of the activities in your group.
- Produce a list of measurable results (code, papers, presentation, new collaboration, activities plan) we can use in the report
- Do a clear plan for STSM and ITC grants
- Assign responsibilities (*honors, but also charges*) to task leaders
- Work on g2net general paper
- Work on github repo
- Do dissemination

We should be ready for our final report!!!



*Be inclusive, welcoming and innovative
in the way you work and collaborate.*