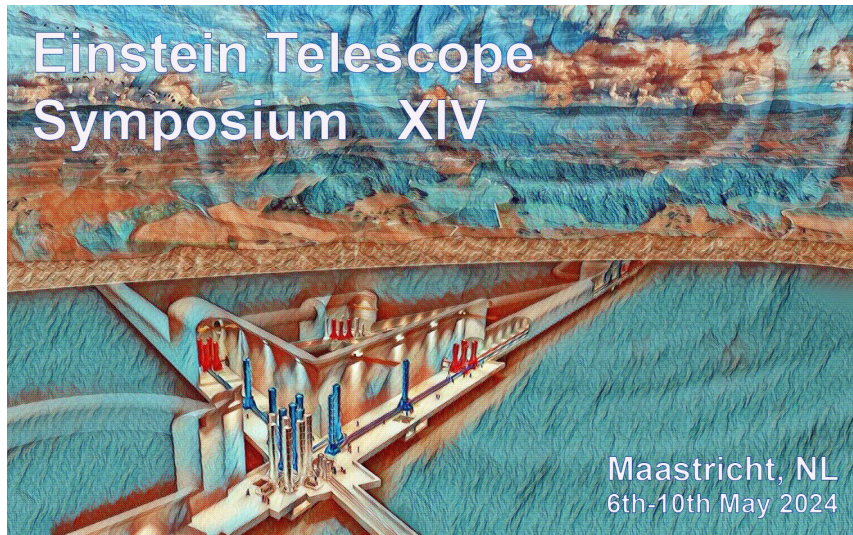


ET Collaboration

Activities and plans

Michele Punturo

Harald Lück



The Code of Conduct defines the behaviour of people within the ET collaboration. It is the foundation of the Collaboration.

The ET Collaboration strives for workplaces free from discrimination and harassment. It is the policy of the Collaborations that all members will conduct themselves in a professional manner that is welcoming to all participants and free from any form of discrimination, harassment, or retaliation. **Members will treat each other with respect and consideration to create a collegial, inclusive, and professional environment. Creating a supportive environment to enable scientific discourse is the responsibility of all members.** Members will avoid any inappropriate actions or statements based on individual characteristics such as age, race, ethnicity, sexual orientation, gender identity, gender expression, marital status, nationality, political affiliation, ability status, or educational background. Disruptive or harassing behaviour of any kind will not be tolerated. Harassment includes but is not limited to inappropriate or intimidating behaviour and language, unwelcome jokes or comments, unwanted touching or attention, offensive images, unwelcome photography, and stalking. Disruptive behaviour includes instances of disrespect and lack of civility in interactions with colleagues. All members are expected at all times to deal with and address their fellow colleagues with respect and courtesy. This includes but is not limited to, behaviour in in-person meetings, virtual (remote) meetings, chats, social media, email communication and other communication formats.

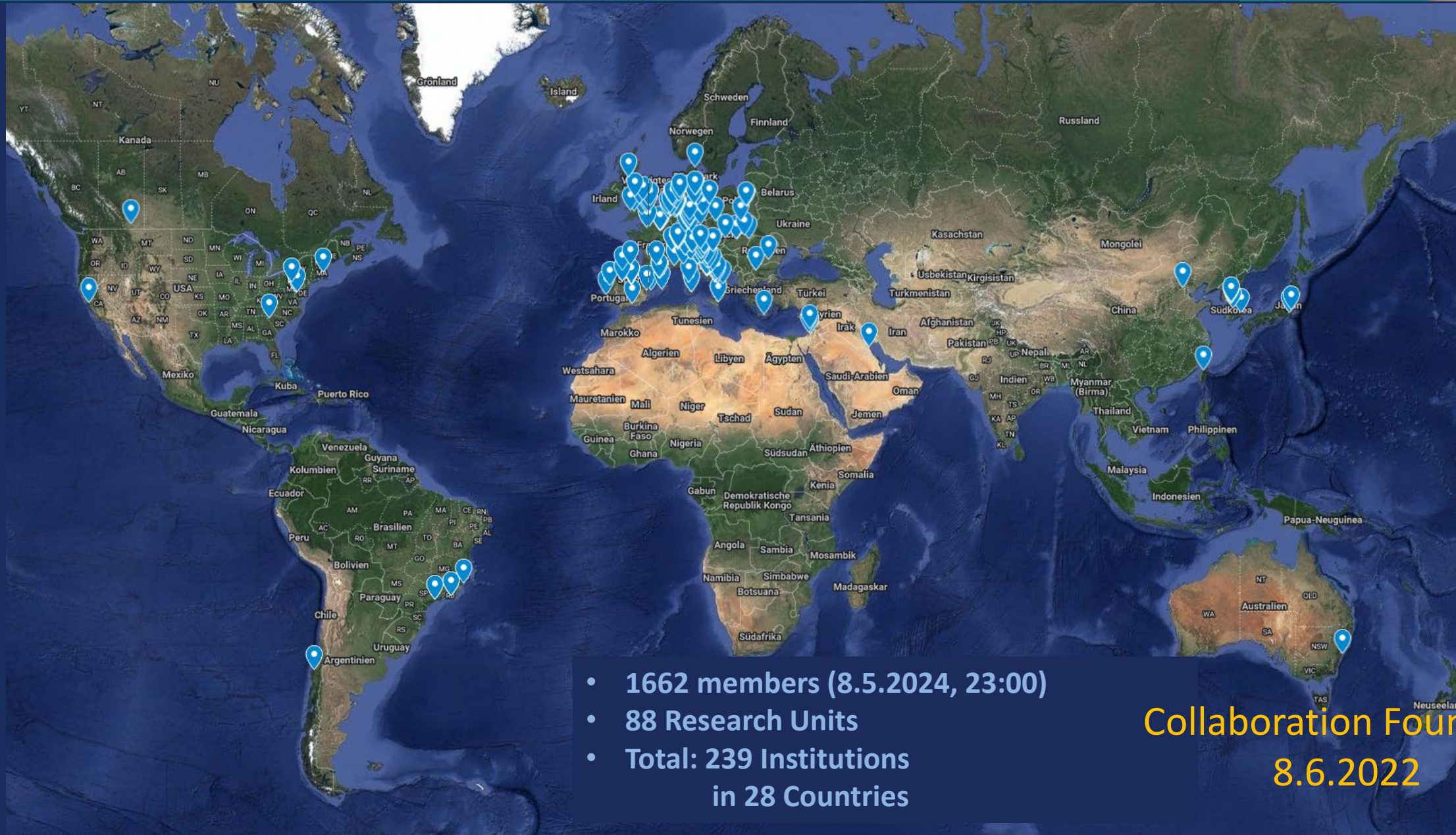
Any professional relationship or action that may result in a conflict of interest in the context of ET must be fully disclosed. When objectivity and effectiveness cannot be maintained, the activity should be avoided or discontinued.

The ET Collaboration also will not tolerate instances of scientific misconduct, which is characterised by any of fabrication, falsification, or plagiarism in proposing or performing research in the ET Collaboration. Fabrication means making up data or results. Falsification means manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. Knowingly reporting or reproducing fabricated or falsified results of others is also considered as misconduct. Plagiarism means the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Violations of this code of conduct policy should be reported as soon as possible to meeting organisers, working group chairs, or the ET Leadership – whatever is most appropriate in the situation. If desired/required, the **Ombudsperson** (see section [E](#)) can be called on and assist in finding an appropriate complaints procedure.

Any violations of the Code of Conduct will be pursued through discussion with the party or parties involved, if desired, with the help of a mediator chosen by the disputing parties. Significant violations can result in immediate consequences in access to ET Collaboration activities; repeated marginal violations will also be addressed. Sanctions for violations of this Code of Conduct will be determined following the grievance procedure and may result, in severe cases, in the permanent exclusion of an individual or group from the ET collaboration. Conflicts which cannot be resolved through collaboration procedures will be referred to the institution of the person(s) who may have violated the Code of Conduct. The Collaboration may take action based on the institution's findings. Retaliation for complaints of inappropriate conduct will not be tolerated. If a member observes inappropriate comments or actions and personal intervention seems appropriate and safe, they should be considerate of all parties before intervening. This Code of Conduct is the defining document for the ET Collaboration.

ET Member's Affiliation Map



- 1662 members (8.5.2024, 23:00)
- 88 Research Units
- Total: 239 Institutions in 28 Countries

Collaboration Founding
8.6.2022

Completion of the ET Structure



ETO: ET Organization

ET Proto-Council

ESFRI
Coordinators

S. Bentvelsen
A. Zoccoli

BGR

Board of Government Representatives

BSR

Board of Scientific Representatives

External
Advisory Bodies

ET Project Directorate
A.Freise, F.Ferroni
M. Martinez

Administration
Offices
Communication
Office

Engineering
Department

Project
Office

Projects

Infradev ET-PP
Implementation
plan of ET
Observatory
M. Martinez
(Managed by
Project Directorate)

**Design of ET
Vacuum Pipe**
P. Chigiato
(CERN coordination)

Civil Engineering
(CERN advisory)

ET Collaboration

Spokesperson: M. Punturo
Deputy: H.Lück

CB
Collaboration Board

EB
Executive Board

SSB
Standard & Services Board

ISB
Instrument
Science Board

EIB
E-Infrastructure
Board

OSB
Observational
Science Board

SPB/SCB
Site Preparation/
Characterization

National Host Teams

EMR
Host Team



Private companies

Sardinia
Host Team



Private companies

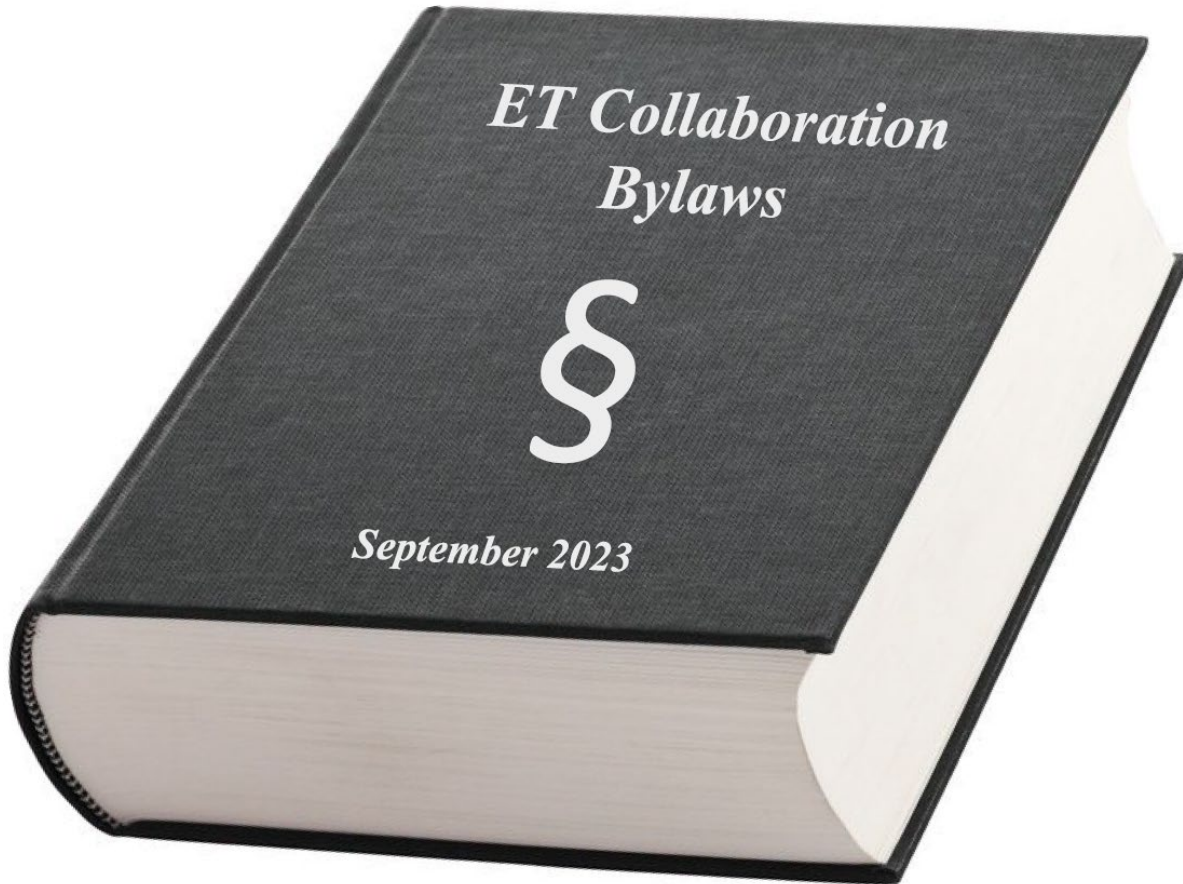
Separate reports on specific boards and SSB

09:00	Welcome <i>St Janskerk</i> 09:00 - 09:20
	ETC - Activities and plans of the collaboration <i>Harald Lueck et al.</i> <i>St Janskerk</i> 09:20 - 09:50
10:00	ETC - The CB and SSB activities <i>Eugenio Coccia</i> <i>St Janskerk</i> 09:50 - 10:10
	OSB status <i>Marica Branchesi et al.</i> <i>St Janskerk</i> 10:10 - 10:50
11:00	SPB Status <i>Domenico D'Urso et al.</i> <i>St Janskerk</i> 10:50 - 11:30
	Coffee 11:30 - 11:50
12:00	ISB Status <i>Jan Harms et al.</i> <i>St Janskerk</i> 11:50 - 12:30
	EIB Status <i>Patrice Verdier et al.</i> <i>St Janskerk</i> 12:30 - 13:10

17:00

SSB elected chairs presentations <i>Anna Green et al.</i>
<i>St Janskerk</i> 16:50 - 17:50

essential committees in the process of being established



<https://apps.et-gw.eu/tds/?content=3&r=18634>

Service and Standards Board: the elected Committee Chairs

- **Project Program Committee (PPC)**
Ettore Majorana (ET-Roma1)
- **Early Career Scientists Support Committee (ECSS)**
Anna Green (Vrije Universiteit Amsterdam)
- **Member Conduct and Ethics Committee (EMCC)**
Monique Bossi (INFN Perugia)
- **Speakers and Awards Committee (SAC)**
Luca Naticchioni (ET-Roma1)
- **Editorial Committee (EC)**
Paola Leaci (ET-Roma1)
- **Election, Voting, and Membership Committee (EVMC)**
Mariafelicia De Laurentis (Napoli)
- **Meetings and Symposia Committee (MSC)**
Jessica Steinlechner (Maastricht University)
- **Communications and Education Committee (CEC)**
Susanne Milde (Hannover)
- **Bylaws Updating Committee (BUC)**
Harald Lück (Hannover)

List of E-tools can be found here: <https://wiki.et-gw.eu/EIB/WebHome>

- TDS (apps.et-gw.eu/tds/)
- Wiki (wiki.et-gw.eu)
- Website(s)
- ETMD (apps.et-gw.eu/etmd/)
- Git repositories (gitlab.et-gw.eu, github)
- Various servers & clouds
 - istnazfisnucl-my.sharepoint.com
 - MS Teams
 - docs.google.com
 - Wolke7
 - Many different Indico servers
 - EGO
 - CERN
 - IN2P3
 - INFN
 - IFAE
 - Nikhef
 - DESY
 - Scc
 - ...
- ...

→ very hard to find information

ETO

- ED
- PO
- PD
- ET-PP (b2drop,...)



ETMDB-how-to

<https://wiki.et-gw.eu/Main/ETMD>

[Activate here: https://userprofile.ego-gw.it/](https://userprofile.ego-gw.it/)

EGO Active Directory account needed, with which to access the ET web services.

Apply for an account here:

<https://userprofile.ego-gw.it/accountrequest.aspx>

choosing the 'ET member' option.

For those who have an account, but are unable to access their ETMD profile, please reset your password associated to the account, here:

<https://userprofile.ego-gw.it/resetpwd.aspx>

For all else - queries or general issues regarding the accounts or accessing any of the web services - please send an email to service@ego-gw.it.

Maintain your profile!

Declare activities. There are still many members with no clear declared activities.

The Specific Boards report a lack of manpower;

pledged activities in ETMD do not match reported activities from WGs

ET Calendar



ET project

Heute ◀ ▶ Mai 2024 ▼ Drucken Woche Monat Terminübersicht

Mo	Di	Mi	Do	Fr	Sa	So
29	30	1. Mai	2	3	4	5
PBS Review: Interferometer Group 1 - University 'La Sapienza' - Piazzale Aldo Moro 5, 00185 Rome 15:00 ET-EB Meeting	14:00 ETO - ET-EB Meeting		09:00 ET-PP coordination meeting			
6	7	8	9	10	11	12
XIV ET Symposium						GWADW - Hamilton Island (Australia)
	09:30 ET-EIB & ET-PP WP8 All-hands meeting		14:00 ET SLC			
13	14	15	16	17	18	19
GWADW - Hamilton Island (Australia)						
14:00 ET-EB Meeting 15:00 BUC meeting 16:00 ET-CB	09:30 ET-EIB & ET-PP WP8 Chairs call 14:00 ETO - ET-EB Meeting 15:00 ET-OSB Div 3 meeting	10:00 EBchairs-ED-PO regular meeting 10:00 ISB - ifo division - WP leaders meeting 14:00 ET Div1 FundPhys telecon		10:00 ET-ISB meeting 11:00 ET LOGO meeting		
20	21	22	23	24	25	26
PBS Review: Optics Group 2 - University 'La Sapienza' - Piazzale Aldo Moro 5, 00185 Rome (Italy) 15:00 ET-EB Meeting	09:30 ET-EIB & ET-PP WP8 "Jolly" slot (TBC)	10:00 EBchairs-ED-PO regular meeting	09:00 ET-PP coordination 14:00 ET SLC	09:30 Optics division meeting		
27	28	29	30	31	1. Juni	2
GWPAW - Tel Aviv, Israel						
15:00 ET-EB Meeting	09:30 ET-EIB & ET-PP WP8 Chairs call 14:00 ETO - ET-EB Meeting	10:00 EBchairs-ED-PO regular meeting 16:00 SPB regular meeting	09:00 ET-PP coordination	10:00 ET-ISB meeting		

Terminanzeige in der Zeitzone: Mittlereuropäische Zeit - Rom



<https://calendar.google.com/calendar/u/0/embed?src=c4rt0eqfj201tt2scv3l3jl8a4@group.calendar.google.com&ctz=Europe/Rome>

ET Monthly Meetings



EINSTEIN
TELESCOPE

ET project

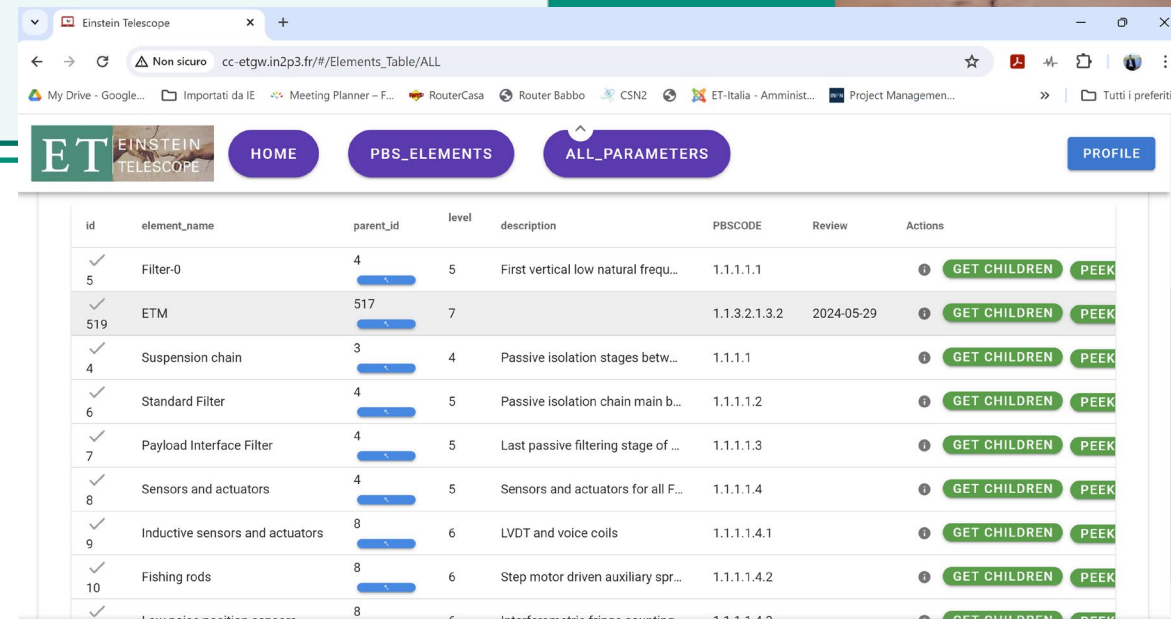
Heute ◀ ▶ Juni 2024 ▾

Mo	Di	Mi	Do	Fr
27	28	29	30	31
GWPAW - Tel Aviv, Israel				
15:00 ET-EB Meeting	09:30 ET-EIB & ET-PP WP8 Chairs call 14:00 ETO - ET-EB Meeting	10:00 EBchairs-ED-PO regular meeting 16:00 SPB regular meeting	09:00 ET-PP coordination	10:00 ET-ISB meeting
3	4	5	6	7
Virgo week				
15:00 ET-EB Meeting	09:30 ET-EIB & ET-PP WP8 all hands meeting 16:00 ET Monthly meeting	10:00 EBchairs-ED-PO regular meeting	09:00 ET-PP coordination 14:00 ET SLC	09:30 Optics division meeting
10	11	12	13	14
15:00 ET-EB Meeting 16:00 ET-CB	09:30 ET-EIB & ET-PP WP8 Chairs call 14:00 ETO - ET-EB Meeting 15:00 ET-OSB Div 3 meeting	Dawn meeting - Vancouver, British Columbia PBS Review: Interferometer Group 2 - University 'La Sapienza' - Piazzale Aldo Moro 5, 00185 Rome 10:00 EBchairs-ED-PO regular meeting	09:00 ET-PP coordination	10:00 ET-ISB meeting
17	18	19	20	21
ET-PP all hands meeting - Barcelona, Spain		10:00 EBchairs-ED-PO regular meeting	09:00 ET-PP coordination 14:00 ET SLC	09:30 Optics division meeting
15:00 ET-EB Meeting	09:30 ET-EIB & ET-PP WP8 "Jolly" slot (TBC)			
24	25	26	27	28
15:00 ET-EB Meeting	09:30 ET-EIB & ET-PP WP8 Chairs call 14:00 ETO - ET-EB Meeting	PBS Review: Optics Group 1 - Rome 10:00 EBchairs-ED-PO regular meeting 16:00 SPB regular meeting	09:00 ET-PP coordination	10:00 ET-ISB meeting

Participation in
monthly meetings ~5%

ET DB: PBS elements and parameters

- The ISB members of the collaboration, under the coordination of the PO, created a huge number of excel files containing the PBS structure and the PBS parameters
- The PO (thanks to Oussama El-Mecherfi and P.Verdier) created a Database that can read all these files
- Added json output to DB (hierarchical human & computer readable format)



The screenshot shows a web application interface for the Einstein Telescope. At the top, there are navigation buttons for 'HOME', 'PBS_ELEMENTS', 'ALL_PARAMETERS', and 'PROFILE'. Below the navigation is a table with the following columns: 'id', 'element_name', 'parent_id', 'level', 'description', 'PBSCODE', 'Review', and 'Actions'. The table contains several rows of data, including 'Filter-0', 'ETM', 'Suspension chain', 'Standard Filter', 'Payload Interface Filter', 'Sensors and actuators', 'Inductive sensors and actuators', and 'Fishing rods'. Each row has a 'GET CHILDREN' and 'PEEK' button in the 'Actions' column.

id	element_name	parent_id	level	description	PBSCODE	Review	Actions
5	Filter-0	4	5	First vertical low natural frequ...	1.1.1.1.1		GET CHILDREN PEEK
519	ETM	517	7		1.1.3.2.1.3.2	2024-05-29	GET CHILDREN PEEK
4	Suspension chain	3	4	Passive isolation stages betw...	1.1.1.1		GET CHILDREN PEEK
6	Standard Filter	4	5	Passive isolation chain main b...	1.1.1.1.2		GET CHILDREN PEEK
7	Payload Interface Filter	4	5	Last passive filtering stage of ...	1.1.1.1.3		GET CHILDREN PEEK
8	Sensors and actuators	4	5	Sensors and actuators for all F...	1.1.1.1.4		GET CHILDREN PEEK
9	Inductive sensors and actuators	8	6	LVDT and voice coils	1.1.1.1.4.1		GET CHILDREN PEEK
10	Fishing rods	8	6	Step motor driven auxiliary spr...	1.1.1.1.4.2		GET CHILDREN PEEK

VERSION : 1.5 Stable Release

[Documentation](#) [Contact Us](#)

```
[{"id":24430,  
  "another_id":"1",  
  "created_at":"2024-04-05T14:08:27.487Z",  
  "updated_at":"2024-04-14T21:45:23.382Z",  
  "pbs_element_id":105,  
  "paramName":"Material ?",  
  "paramValue":"Fused Silica",  
  "paramUnit":"",  
  "paramMargin":"",  
  "paramType":"Constraint specific",  
  "description":"",  
  "ref":"ET-0007B-20 table 6.1 p95",  
  "comment":"",  
  "flag":"",  
  "identity":"FUNCTIONAL",  
  "impact_or_zaxis":"",  
  "author":"Jessica Steinlechner",  
  "verified_by":"",  
  "custom_fields":null,  
  "pbs_element_id_PBSCODE":"1.1.2.1.1.1"}]
```


PBS review meetings organised by PO:
several in-person PBS review meetings are going on in Rome.

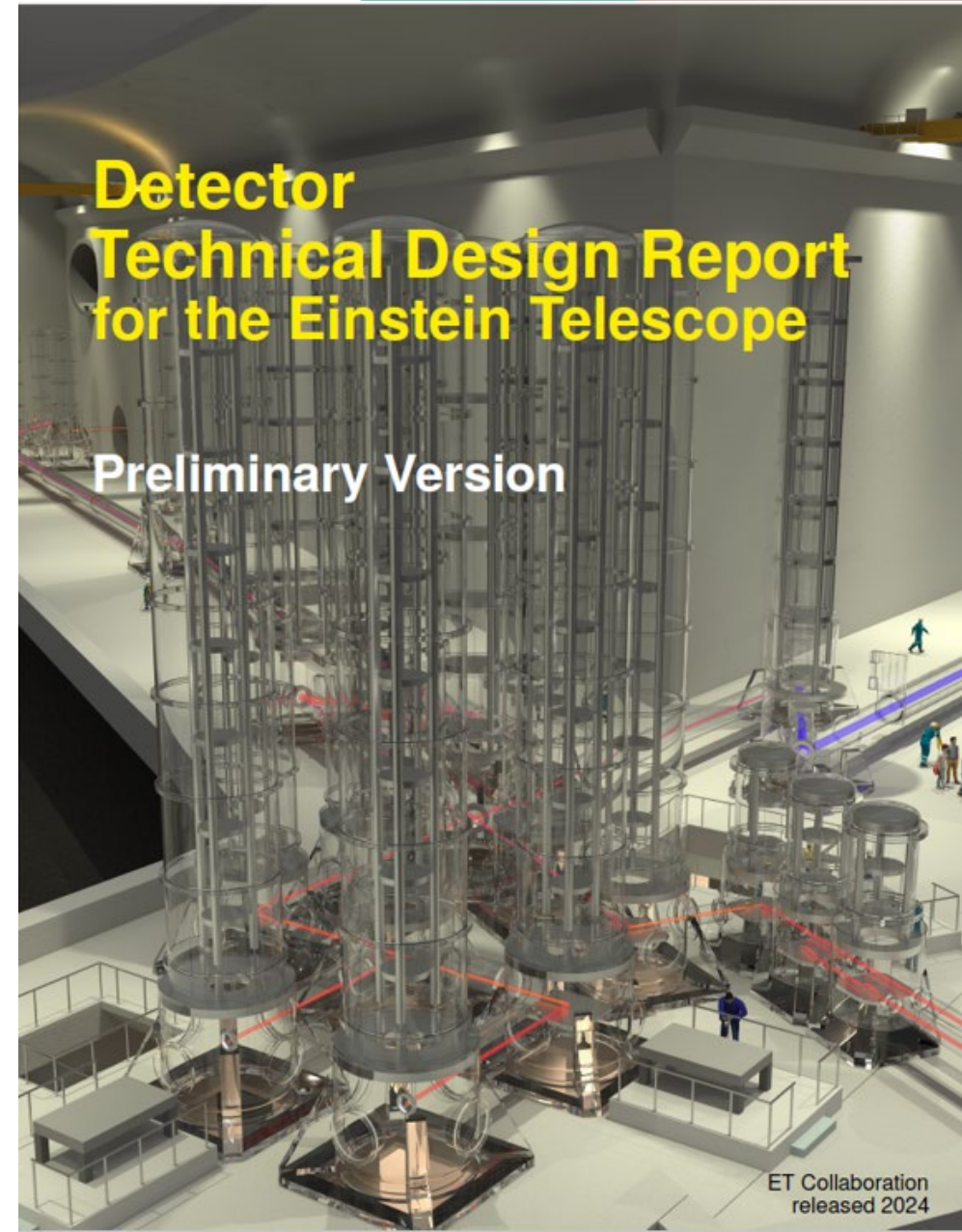
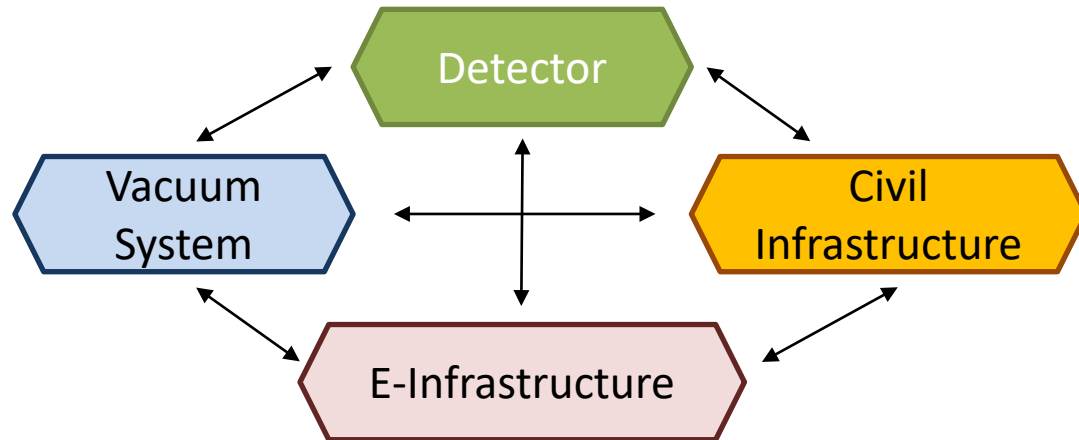
Imported into relational database

- database is operational
- only ca. 35% (638 / 1824) of all parameter files have been submitted.
- 1824 PBS elements have 9243 parameters. Many more to come.
- „has an impact on“ is rarely filled in the database (229/9243) = 2.5%.

Actions needed:

- We need to pick up (even more) speed
- Quality improvement
- Fullfil the 100% rule

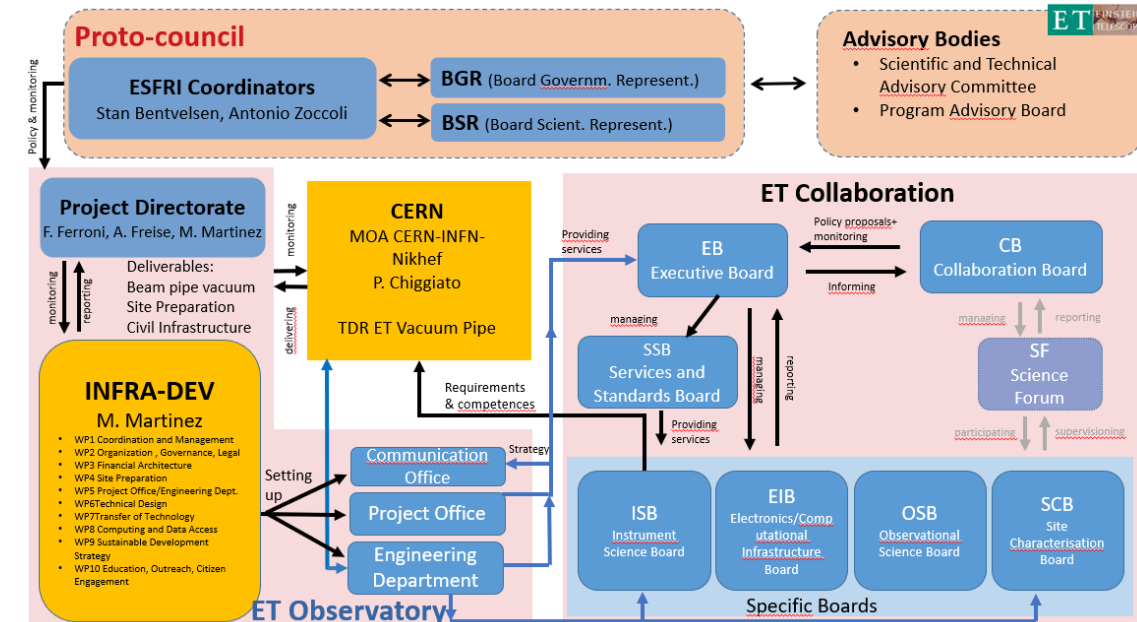
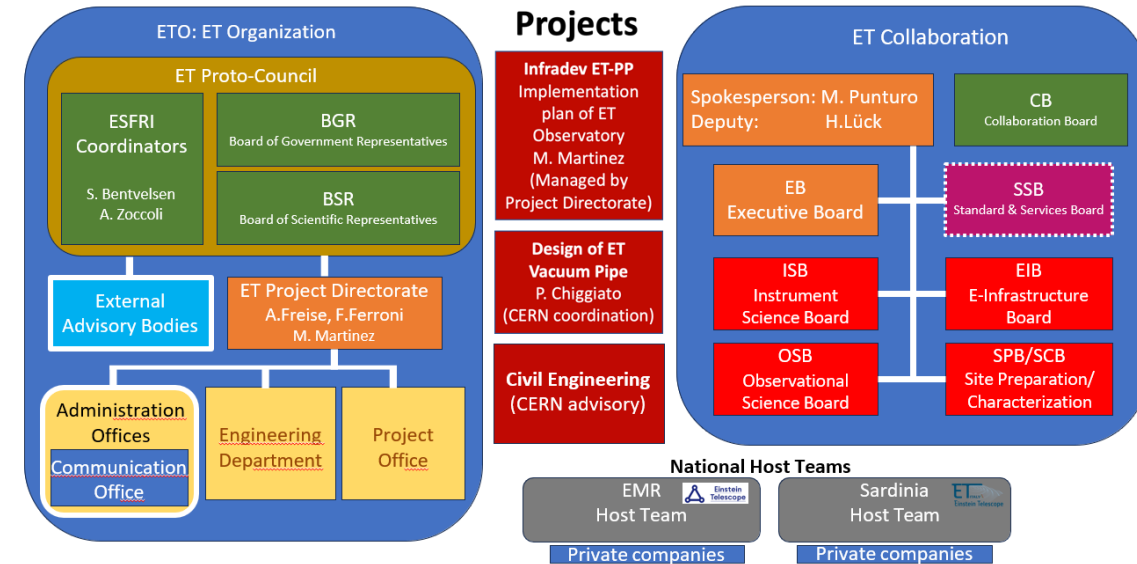
- Different aspects of the ET project need to be designed
- These TDRs are interlaced:
We need to start with a preliminary phase and then proceed in iterations



Role of ETC in ET



- Better define the role of the Collaboration within ET, interaction procedures with ETO and responsibilities
- Introduce more project management elements (and the mental approach) into the work of the Collaboration (clear mandates, deliverables, milestones, responsibilities)
- MOAs/MOUs with the RUs: core business guidelines Program Committee chaired by Ettore Majorana
- Collaboration input for defining the ET roadmap



TRL management of the ET technologies:

The technologies used in ET cover a wide variety and are at very different maturity levels.

- assess and document the technology readiness levels (TRLs) of ALL systems and elements
- manage R&D to bring them to the required level at the right time.
- Set timelines for all items.
- Consider and exploit world-wide synergies

External communication is **one common task of the ET Project**

- not separate ones for ETO and ETC
- To the outside world

Voices in the halls:

„Lots of positive feedback from the discussions and progress presented in the parallel sessions“

Yet, there is need for more communication between boards (e.g. OSB- EIB), divisions, WGs



- Annual ET Meeting in November 2024
- XV ET Symposium Spring 2025

We have got a Meeting and Symposia committee being developed now.

Meetings and Symposia Committee (MSC)
Jessica Steinlechner (Maastricht University)

Need volunteers for hosting and a LOC.

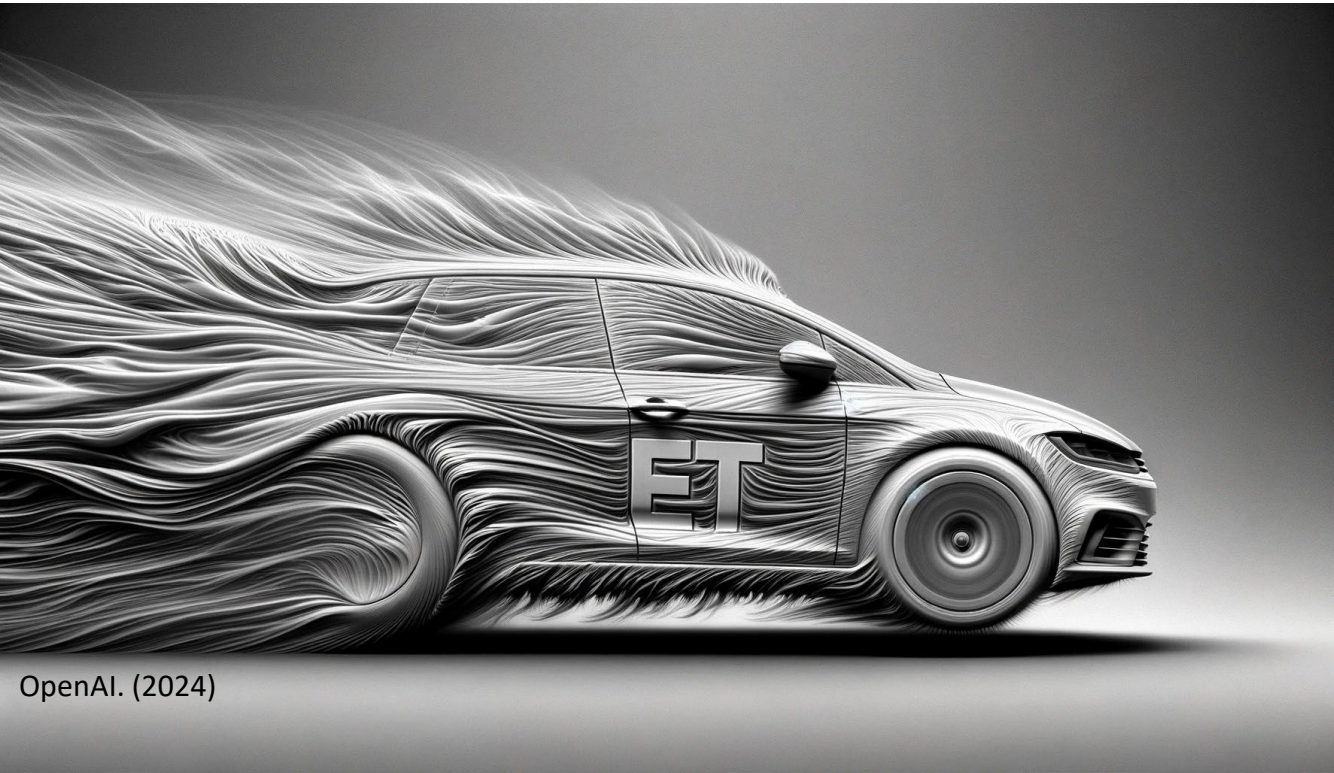
Deadlines for volunteers:

- Mid June for the annual meeting
- End of August for XV ET Symposium

Finally...

Michele Punturo:

ET is currently going at very high speed, so it is only natural that there are some turbulences



But ... turbulences also cause drag