

Tasks assignment

F. Sorrentino

ETO task force on detector layout

Amsterdam meeting - March 18÷20, 2025



Workshop target & work plan

- Finalize study of possible configurations for 2L detector layout
- Progress on TRL, risk & flexibility analysis
- Progress on system decomposition and requirements tree
- Work in parallel sessions: conveners should
 - grab necessary competences for session target
 - split work into subgroups whenever necessary
 - keep track of design and discussion output - pretty much like in Pisa meeting
 - edit rolling agenda in Sharepoint - linked to session on indico
 - upload working material on GitLab repository
 - edit overleaf document if possible
 - if necessary, ask key people to move between simultaneous sessions
 - e.g. after coffee break in the middle of parallel sessions
 - report about main outcome @ plenary session on the morning after

1st day - afternoon

- Parallel session 1 - Veltman Centre: Optical layout / Detector layout
 - Chairs: A. Green, A. Perreca & J. Bratanata (second part)
 - Goal: vertex cavern reduction by optics merging
 - First part: optical layout - **proposed list of participants:** T. Bud (remote), A. Chiummo, G. Ciani (remote), A. Freise, M. Korobko, V. Sequino (remote), S. Steinlechner, M. Vardaro, P. Werneke
 - Second part: detector layout - **proposed list of participants:** T. Bud (remote), A. Freise, M. Korobko, V. Sequino (remote), S. Steinlechner, P. Werneke
- Parallel session 2 - Library: TRL analysis
 - Chairs: G. Mahmoud
 - Goal: complete identification of options in critical technologies, and corresponding TRL assessment
 - First part: vacuum & cryogenics - **proposed list of participants:** H. J. Bulten, A. Cruciani, J. Gargiulo, S. Grohmann, E. Majorana
 - Second part: optics - **proposed list of participants:** A. Chiummo, G. Ciani (remote), M. Vardaro
- Parallel session 3 - Bottom: Tower categorisation
 - Chairs: R. Meijer & F. Spada
 - Goal: finalize list of options for all categories of towers and corresponding geometrical envelope
 - First part: room-T optics - **proposed list of participants:** C. Mow-Lowry, P. Ruggi (remote), N. Holland
 - Second part: continuing + LF-TM - **proposed list of participants:** C. Mow-Lowry, P. Ruggi (remote), N. Holland, H. J. Bulten, A. Cruciani, J. Gargiulo, S. Grohmann, E. Majorana

2nd day - morning

- Parallel session 1 - Veltman Centre: Detector layout
 - Chairs: J. Bratanata & R. Meijer
 - Goal: update on major cavern space claims (cryogenic infrastructure, clean rooms, etc.)
 - **proposed list of participants:** T. Bud (remote), A. Freise, A. Green, H. J. Bulten, A. Cruciani, J. Gargiulo, S. Grohmann, A. Perreca, P. Werneke
- Parallel session 2 - Library: TRL analysis
 - Chairs: G. Mahmoud
 - Goal: complete identification of options in suspension technologies, and corresponding TRL assessment
 - **proposed list of participants:** N. Holland, C. Mow-Lowry, P. Ruggi (remote), F. Spada
- Parallel session 3 - Bottom: Noise budget and science case
 - Chairs: F. Iacovelli & M. Korobko
 - Goal: derive scientific requirements on relevant parameters for optical layout & critical technologies
 - **proposed list of participants:** A. Chiummo, U. Dupletsa, G. Ciani (remote), E. Majorana, S. Steinlechner, M. Vardaro, V. Sequino (remote)

2nd day - afternoon

- Parallel session 1 - Veltman Centre: Detector layout
 - Chairs: J. Bratanata & S. Grohman
 - Goal: develop concept of double cavern, limited to space distribution & 3D model
 - **proposed list of participants:** H. J. Bulten, A. Cruciani, A. Green, C. Mow-Lowry, A. Perreca, F. Spada, P. Werneke
- Parallel session 2 - Library: risk analysis
 - Chairs: G. Mahmoud
 - Goal: identify and assess main technical risks on chosen configurations for detector layout
 - **proposed list of participants:** T. Bud (remote), G. Ciani (remote), A. Chiummo, A. Freise, J. Gargiulo, N. Holland, R. Meijer, S. Steinlechner
- Parallel session 3 - Bottom: Noise budget and science case
 - Chairs: U. Dupletsa & M. Korobko
 - Goal: derive scientific requirements on relevant parameters for optical layout & critical technologies
 - **proposed list of participants:** F. Iacovelli, E. Majorana, P. Ruggi (remote), M. Vardaro, V. Sequino (remote)

3rd day - morning

- Parallel session 1 - Veltman Centre: Optical layout
 - Chairs: A. Green & A. Perreca
 - Goal: review flexibility envelope for optical layout, extend to detector layout
 - ***proposed list of participants:*** J. Bratanata, T. Bud (remote), H. J. Bulten, A. Chiummo, G. Ciani (remote), A. Freise, J. Gargiulo, S. Grohman, N. Holland, R. Meijer, F. Spada, S. Steinlechner, P. Werneke
- Parallel session 2 - Library: civil engineering
 - idle
- Parallel session 3 - Bottom: Noise budget and science case (optional)
 - Chairs: F. Iacovelli & M. Korobko
 - Goal: derive scientific requirements on relevant parameters for optical layout & critical technologies
 - ***proposed list of participants:*** U. Dupletsa, E. Majorana, P. Ruggi (remote), M. Vardaro, V. Sequino (remote)

3rd day - afternoon

- Parallel session 1 - Veltman Centre: Detector layout
 - Chairs: J. Bratanata, A. Green & A. Perreca
 - Goal: build optical layout and detector layout with separate HFI and LFI
 - ***proposed list of participants:*** H. J. Bulten, A. Cruciani, S. Grohman, N. Holland, M. Korobko, E. Majorana, R. Meijer, C. Mow-Lowry, P. Ruggi, V. Sequino, F. Spada, S. Steinlechner, M. Vardaro, P. Werneke
- Parallel session 2 - spare
- Parallel session 3 - Bottom: Flexibility analysis
 - Chairs: G. Mahmoud
 - Goal: build rigidity matrix based on system decomposition
 - ***proposed list of participants:*** T. Bud (remote), G. Ciani (remote), A. Chiummo, U. Dupleta, A. Freise, J. Gargiulo, N. Holland, F. Iacovelli, S. Steinlechner