

II. Workshop on ET-LF TM Tower Integration

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ET Activities at LNF: Status and Future Directions

Tuesday 25 March 2025 17:15 (45 minutes)

The primary objective of the activities conducted at LNF is to investigate and validate innovative strategies for the active mitigation of ice formation and electrostatic charging on mirrors, as well as to collaborate with EGO/Virgo on the passive mitigation of charge emission from ion pumps. These efforts are currently in progress, with preliminary results from prototype systems demonstrating the potential efficacy of the proposed approaches. In principle, these strategies could be successfully implemented in real-world applications. However, to ensure the seamless integration of these mitigation strategies into the design of the ET towers and vacuum systems, further advancements in engineering and technological solutions are imperative. To align with the overall infrastructure timeline, it is crucial to initiate this R&D work at the earliest opportunity.

The goal of this presentation is to address these critical aspects and foster a constructive discussion on concrete R&D proposals, paving the way for the successful implementation of these strategies in future projects.

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Session Classification: Status and project constraints