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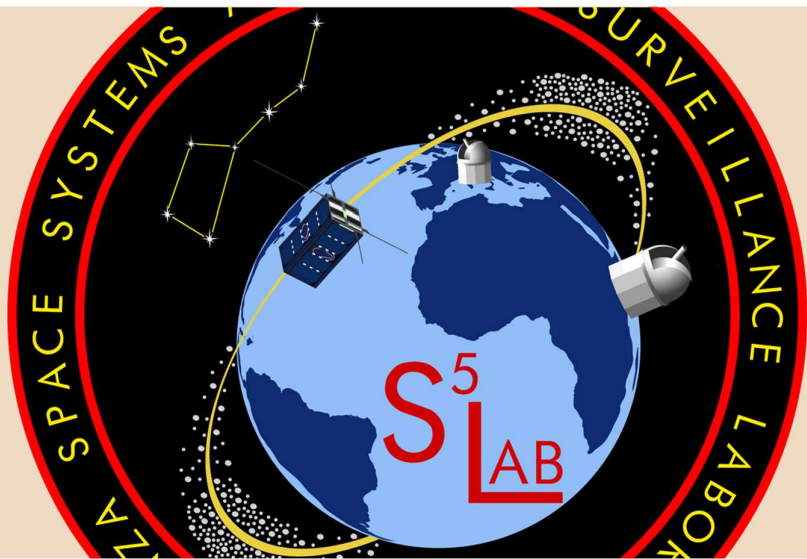


SMILE-IoT

Internet-of-Things small
investigations for Space
Sustainability -
An International Partnership
Project

Paolo Marzioli,
IAF Spring Meetings 2025, Paris

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The SMILE-IoT initiative

- **Sustainable Space Missions and Innovative Low-Cost Experimentation through Internet-of-Things**
- Funded under the NextGeneration EU Programme – Sapienza/Rome Technopole Foundation call for internationalization of research
- Objective: Creating a shared network of researchers and stakeholders for low cost IoT joint research, sharing results on low-cost applications of IoT, such as:
 - Resources monitoring (SIMBA, KITSUNE, MO-1, ...)
 - Inter-Satellite Link and coordination, potential outcomes on STM, ADR (CORAL)
 - General performance assessments

Started in November 2024





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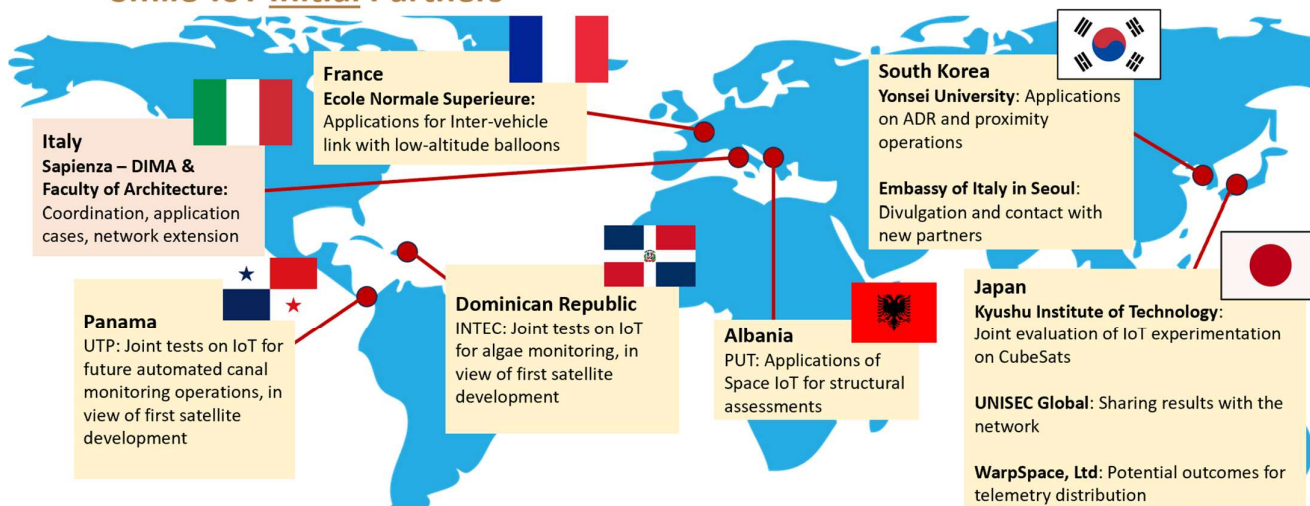
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Smile-IoT Initial Partners



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Preliminary Results: Yonsei University & Embassy of Italy in Seoul

- Collaborative CubeSat mission with IoT payloads on-board – potential targets for CORAL
- New longer-term IoT mission to be carried out together
- Future applications in proximity operations – in the perspective for Active Debris Removal, Space Traffic Management, Just in time Collision Avoidance
- Participation in Italian Embassy's «National Space Day» next week with joint presentations





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Up next:

2025:

CORAL launch and release from ISS and ISL demonstration operations

New possible payloads in Internet-of-Things for Space Sustainability:
collaboration with Universities, Research Institution, Companies

We need collaborators for CORAL (IoT payload for ISL) and for Smile-IoT:
wanna join the network? Email me!



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Thanks for your attention!



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