

**PROBES of new physics and technological advancements from particle
and gravitational wave physics experiments.
A cooperative Europe – United States – Asia effort**



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November 27th, 2025, Pisa



***H2020 MSCA RISE 2020
GA 101003460***



Simone Donati, PROBES MidTerm Review Meeting, Nov 27th, 2025, Pisa (Italy)

What needs to be done between now and PROBES conclusion - I

Today – February 28, 2026

All the Researchers of all Beneficiaries that have **executed only 0.X Months of Secondment** should **complete at least the first Month** of Secondment

0.X Months of executed Secondment does not receive financial support from Probes and must be financed by the Beneficiary with autonomous resources

1.Y Months of executed Secondment receives financial support

The Administrations of all Beneficiaries should **insert the executed Secondment in the Portal** and **proceed with the Financial Report**

March 2026 – April 2026

The Administration of all Beneficiaries should **insert the Financial Report in the Portal**

What needs to be done between now and PROBES conclusion - II

Today – February 28, 2026

All the Beneficiaries should prepare the **List of Publications** which report the Acknowledgements to Probes, I will insert the Publications in the Portal

All the Beneficiaries should prepare the **List of Talks at International Conferences, Workshops, Congressi**, given by Researchers that have had some involvement in Probes

All the Beneficiaries should prepare the **List of Outreach Events, Exhibitions, Flyers, Social Media Events, Videos/Films**, in which Researchers involved in Probes have participated

What needs to be done between now and PROBES conclusion - III

Today – February 28, 2026

We need to prepare several Deliverables, on the several Work Packages

1.3. Workplan Tables - Detailed implementation

1.3.1. WT1 List of work packages

WP Number ⁹	WP Title	Lead beneficiary ¹⁰	Start month ¹²	End month ¹³
WP1	Hadron Physics: Detectors	1 - INFN	1	48
WP2	Hadron Physics: Data Analysis	11 - UGLS	1	48
WP3	LFV Experiments: Detectors	7 - IMPERIAL	1	48
WP4	LFV Experiments: Data Analysis	6 - PSI	1	48
WP5	Gravitational Waves: Detectors	14 - EGO	1	48
WP6	Multi-Messenger Physics	8 - CNRS	1	48
WP7	Dissemination and Outreach	15 - IFAE	1	48
WP8	Transfer of Knowledge	3 - CERN	1	48
WP9	Management	1 - INFN	1	48
WP10	Ethics requirements	1 - INFN	1	48

What needs to be done between now and PROBES conclusion - IV

1.3.2. WT2 list of deliverables

Deliverable Number ¹⁴	Deliverable Title	WP number ⁹	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷	
D1.1	CLAS12/SBS detector commissioning	WP1	12 - CEA	Report	Public	36	Done
D1.2	HPS/BDX commissioning	WP1	8 - CNRS	Report	Public	36	Done
D1.3	Technical reports on bulk magnets and streaming-readout	WP1	1 - INFN	Report	Public	36	Done
D2.1	CLAS/SBS physics results	WP2	11 - UGLS	Report	Public	36	Done
D2.2	HPS/BDX physics results on light matter search	WP2	1 - INFN	Report	Public	48	Draft
D2.3	Physics results on neutron star Equation of State	WP2	1 - INFN	Report	Public	48	Draft
D3.1	Report on COMET Phase-I/MEG-II/ Mu3e/ Mu2e performance	WP3	7 - IMPERIAL	Report	Public	36	Pending
D3.2	Performance of HiMB at PSI	WP3	6 - PSI	Report	Public	36	Done
D3.3	Next Generation CLFV experiments	WP3	11 - UGLS	Report	Public	48	Draft

What needs to be done between now and PROBES conclusion - V

D4.1	COMET Phase-I, Mu2e, MEG-II/ Mu3e physics results	WP4	13 - UNIPI	Report	Public	48	Pending
D4.2	SBN physics results on sterile neutrino searches	WP4	5 - UBERN	Report	Public	48	Pending
D5.1	Environmental sensing, projection to 3rd generation GW detectors	WP5	16 - ASTROCENT	Report	Public	36	Pending
D5.2	Simulation program, sensor network for light injection, stray light control, frequency dependent squeezing	WP5	14 - EGO	Report	Public	36	Pending
D5.3	Coordination of 3rd generation GW detectors development	WP5	1 - INFN	Report	Public	24	Done
D6.1	GW event localization code ported to high-performance computational architecture	WP6	13 - UNIPI	Report	Public	42	Pending

What needs to be done between now and PROBES conclusion - VI

Deliverable Number ¹⁴	Deliverable Title	WP number ⁹	Lead beneficiary	Type ¹⁵	Dissemination level ¹⁶	Due Date (in months) ¹⁷	
D6.2	Cloud supported GWOSC	WP6	8 - CNRS	Report	Public	12	Done.
D6.3	Global computing model	WP6	17 - NIKHEF	Report	Public	48	Pending
D7.1	Workshop day at General Meetings	WP7	8 - CNRS	Report	Public	42	Pending
D7.2	Summer Students at US Laboratories	WP7	13 - UNIPD	Report	Public	8	Done.
D8.1	Trainings at General Meetings	WP8	3 - CERN	Report	Public	42	Pending

What needs to be done between now and PROBES conclusion - VII

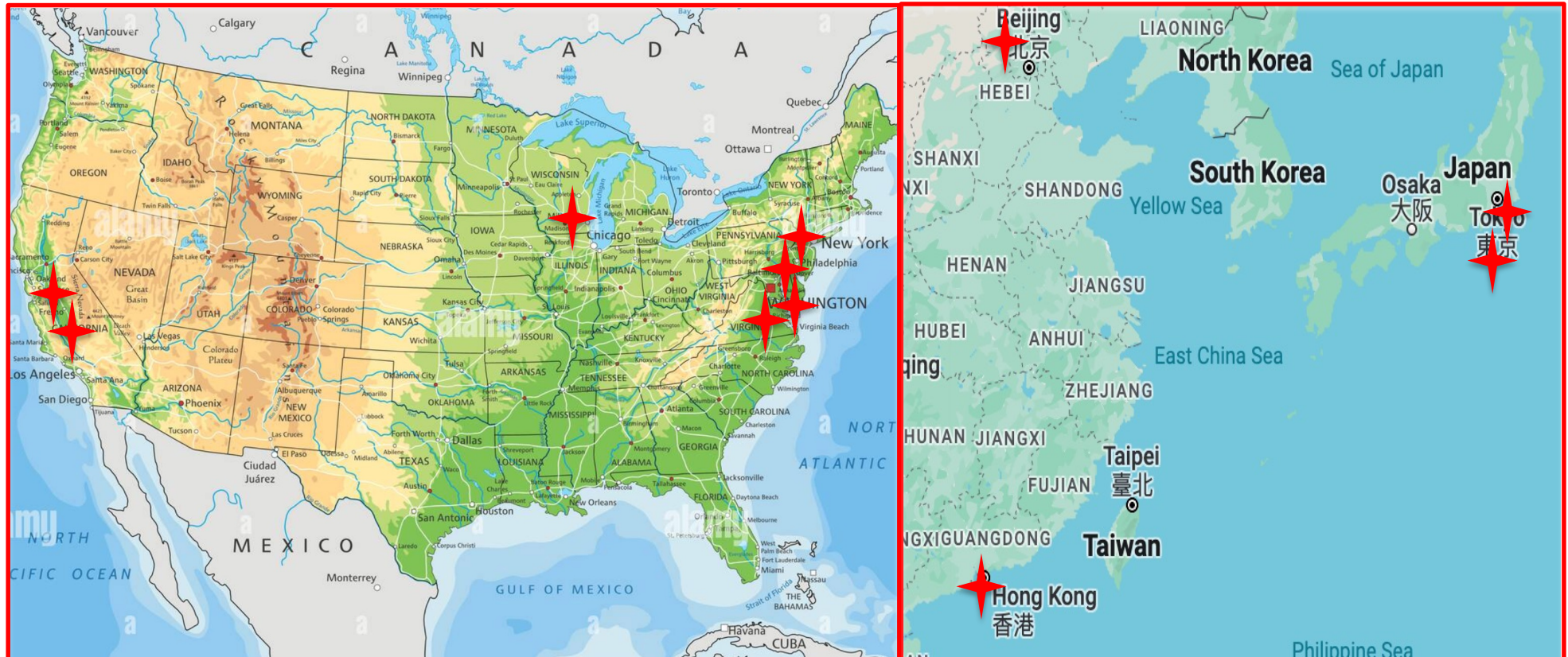
D9.1	Project/Outreach web site	WP9	1 - INFN	Report	Public	5	Done
D9.2	Open Research Data Pilot	WP9	1 - INFN	ORDP: Open Research Data Pilot	Confidential, only for members of the consortium (including the Commission Services)	5	Done
D9.3	MidTerm Meeting	WP9	1 - INFN	Other	Confidential, only for members of the consortium (including the Commission Services)	18	Done
D9.4	Progress Report 1	WP9	1 - INFN	Report	Confidential, only for members of the consortium (including the Commission Services)	13	Done
D9.5	Progress Report 2	WP9	1 - INFN	Report	Confidential, only for members of the consortium (including the Commission Services)	37	Pending
D10.1	NEC - Requirement No. 1	WP10	1 - INFN	Ethics	Confidential, only for members of the consortium (including the Commission Services)	1	Done

Conclusions

The conclusion of Probes is approaching, we need to proceed, we can do it

Backup

A cooperative Europe – United States – Asia effort



PROBES PARTNERS			
Fermi National Accelerator Laboratory	US	KEK	JP
Jefferson Laboratory	US	University of Tokyo	JP
California Institute of Technology	US	Chinese Ac. Science	CN
Massachusetts Institute of Technology	US	University of Hong Kong	HK
University of California	US		
Princeton University	US		
Johns Hopkins University	US		

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