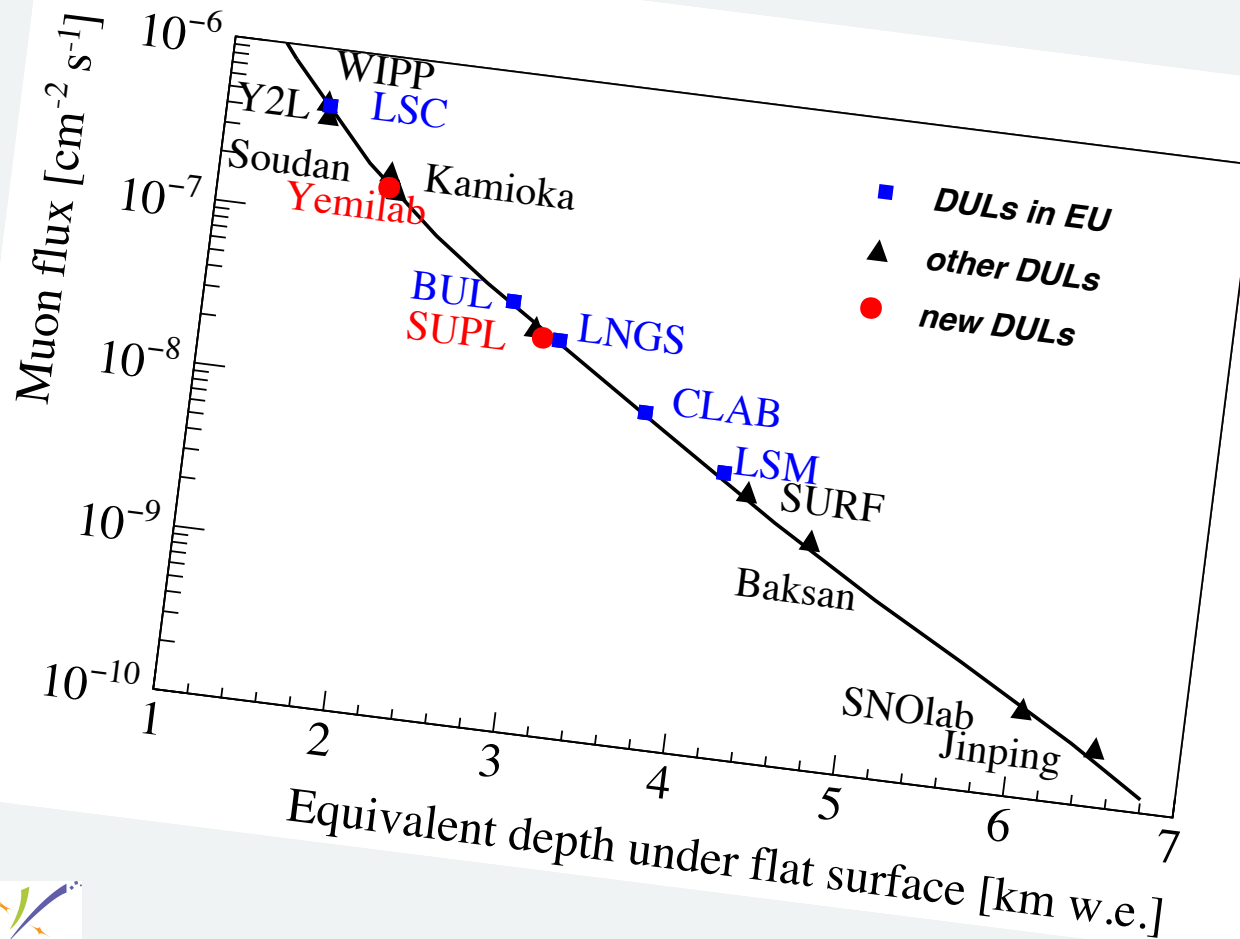


Overview on Workshop activities

Aldo Ianni

April 28th,

Workshop on EU
Underground Laboratories



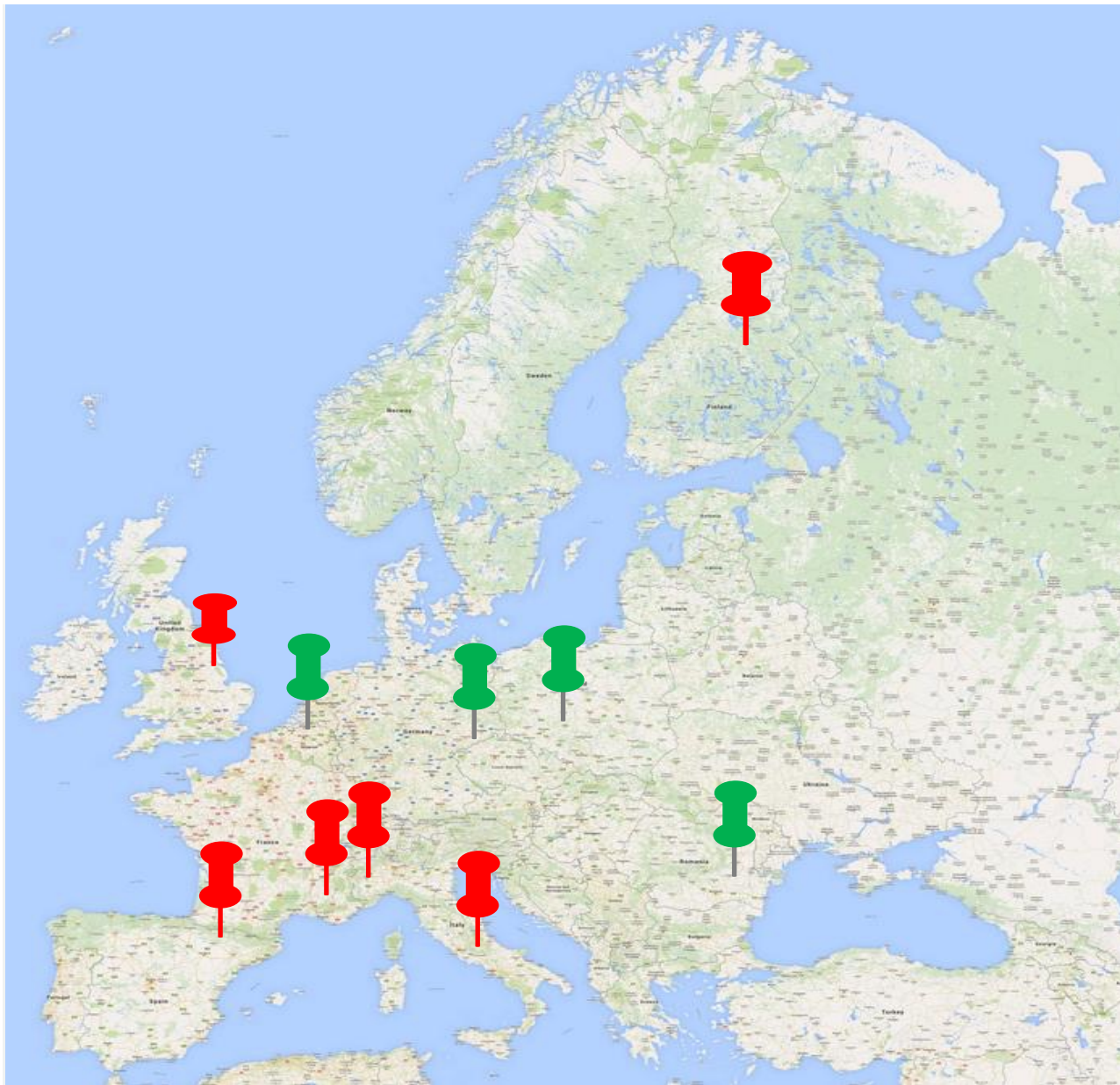
Main purpose of this Workshop

- **The Workshop aims to reinforce the network between EU Underground Laboratories (to be extended outside EU) in order to develop a strong synergy to face next generation experiments for rare events searches.**
- **Support multidisciplinary strategy in ULs**
- **Develop strong synergy within the framework of APPEC and international Community**
- **Establishing connections and building plans toward forming an international UL collaboration and coordination**

A roadmap toward and EU ULs network



- Overview of research infrastructures in ULs
- Enhance collaboration
- Strategic development and sharing of R&D for future projects
- Reinforce and innovate existing facilities to support research
- Strategic use of underground space
- Strategic use of ULs different features
- Training of personnel
- Management of Safety in ULs
- Work load sharing for big projects



- Participants to the effort as of today: LNGS, LSC, LSM, LSBB, Boulby, CLAB
- This Workshop might enlarge the effort to other ULs

Work in progress

- Since a few months Directors of targets EU ULs have met to
 - *define a coordination plan*
 - *perform an overview of existing and planned facilities to support research*
 - *define the possibility to use facilities in different labs*
 - *future sharing of operations practices*
 - *identify common interests*

Common interests to start developing a network and enhance collaboration



- T1: SiPM based innovative photo-detectors
- T2: Superconducting sensors in ultra-low background environments for quantum computing
- T3: Innovative technology in radio-purity assay
- T4: New technology for Rn-free environments
- T5: New advanced technologies for cryogenic infrastructures
- T6: Additive manufacturing for rare events searches
- T7: Biology in ULs
- T8: Safety and engineering in ULs
- T9: Cosmic rays and muon radiography

APOGEIA

WP5: Underground Technologies

- APOGEIA is the stepping stone for our plan
- Based on identified common interests we have organized the following WGs and sharing of responsibilities

Task	T1	T2	T3	T4	T5	T6	T7	T8
Lead participant	LNGS	LSC	Boulby	LSM	LNGS	LNGS	LSC	CLAB
Other participants	LSC	LNGS	LNGS, LSC,LSM	LNGS	LSBB	LSC, Boulby	LNGS, Boulby, LSM, CLAB, LSBB	LNGS, Boulby, LSM, LSC, LSBB

More involvement
in APOGEIA from
ULs

- WP3: fiber optics
- WP4: Cosmic Rays and Muography
- WP8: Dissemination and Outreach

About this Workshop

- Discuss outcome of Working Groups effort on main interests indentified by ULs
 - available facilities,needs, innovations, risks ...
 - 8 talks on specific topics
 - review of ULs
- Get ULs Directors and APPEC Community together to start building a plan for the proposed network