

EL SUD Meeting, 24.04.06

Common Name: EL SUD – European Large-Scale Underground Detector
to be decided in June, to be used at NNN06 in Seattle (09/06)

Proposal:

- contains (up to) three design studies
- stresses complementarity
- shows specific qualities of the techniques concerning different physics fields
- common developmental and scientific tasks are done in a joint venture to save time and funding
- formulation in summer, submission maybe 03/07
- no double-funding by FP7 and ISS
- concentration on liquid, low background detectors, no expansion on other beta-beam detectors (ISS)
- focus on astroparticle and neutrino physics

List of the 7 possible detector sites:

- Boulby (GB)
- Canfranc (Spain)
- Frejus (France/Italy)
- Gran Sasso
- Pyhäsalmi (Finland)
- Pylos (Greece)
- Sieroszowice (Poland)

New Working Groups

1. Tank Instrumentation (Light/Charge Detection, Electronics)
2. Underground Tanks
3. Data Acquisition and Analysis, Calibration
4. Cosmic Rays, Background and Materials Analysis
5. Site and Cavity
6. Liquid Production, Purification and Handling
7. Safety and Environment (Ventilation, Power Supply etc.)
8. Physics and Simulations

Annotations:

- Site and Cavity could be treated inside the ILIAS network
- persons in charge of a subject that were chosen in this meeting should define questions for next meeting and inform people interested in this field

“Three Liquids” Paper

- additional topics that should be dealt with:
possible Detector Sites, short Summary
- authors list should maybe include people that express their interest in engagement
- option of publishing it as a Physics Review (invitation?) or in Astroparticle Physics, stressing the aspect of a multi-purpose observatory
- 2nd paper on techniques planned
- Distribution to APEC, CERN Strategy Group, ESFRI (?)

Outlook:

- Open meeting planned for fall 06
European workshop of 1-2 days to gather interested people

WORKING GROUPS

1. Light Detection

N. Spooner
A. Bueno
J. Bouchez
J. Poulhas (IPNO)
T. Marrodán Undagoitia
M. Wurm

2. Tank

L. Mosca
F. von Feilitzsch
A. Rubbia (ETHZ)

3. Electronics

R. Zimmermann
Ch. de La Taille (LAL)
J.E. Campagne

4. DAQ & Analysis

N. Spooner
R. Zimmermann

5. Cosmic Rays

T. Enquist
N. Spooner
V. Kudrgavtsov (Sheffield)

6. Site & Cavity

J. Peltoniemi
N. Spooner
J. Kisiel
L. Mosca

7. Liquid Prod., Purif. & Handling

L. Oberauer
A. Rubbia
M. Wurm

8. Safety & Environment

N. Spooner
T. Enquist
L. Mosca

9. Calibration

C. Hagner
J. Bouchez

10. Physics & Simulations

L. Oberauer

J. Bouchez
A. Bueno
J.E. Campagne
C. Hagner
T. Marrodán Undagoitia
J. Peltoniemi
A. Rubbia
N. Spooner
M. Wurm
R. Zimmermann

11. Background & Materials

J. Kisiel
L. Oberauer

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