

Three Liquids Meeting in Garching, 2nd of June 06

Possible Project Names

Names proposed in course of the meeting, an e-vote on the name is planned:

- LARge Underground Detectors in Europe
LAUDE
- European Large-Scale Underground Detectors
EL SUD
- Large Underground Detector Network
LUDnet
- European Underground Large Detectors
EULADE
- Large Underground Neutrino Astrophysics and Proton instABILITY Research Center
LUNAPARC
- Large Apparati for Grand Unification and Neutrino Astrophysics
LAGUNA
- Large Underground Detector for Neutrino Astrophysics
LUDNA
- Large European underGround Observatory
LEGO
- European (Large) UnderGround Observatory
E(L)UGO

Scientific Paper

- aim: scientific paper ready for proposal at July 31
- Further contributions possible until June 20
- Committee will review the paper until July 5 (proposed members: A. Rubbia, J. Bouchez, T. Marrodan, F. v. Feilitzsch, S. Katsanevas)
- way of publication was discussed but not decided
- physics case should be added for each of the following topics to motivate the detector(s): (proposed writers are listed in brackets)
Supernova physics (Georg Raffelt)
proton decay (Perez)
neutrino properties derived from atmospheric, beam, reactor, solar, SN ... neutrinos (M. Lindner)
geophysics (Fiorentini)
solar physics (Weiss, C. Pena-Garay, Gonzalez-Garcia)
intended are 2-3 pages summary for each case

- experimental signatures should be arranged matching the physics case
- missing contributions:
atmospheric neutrinos (A. Bueno ?)
indirect dark matter search
- minimize the section on non-conventional neutrino beams
- expand sites chapter, incl. depth, distances to acc etc. (people from individual sites, 1/2 page each)

Representation of 3L at Conferences

list of relevant conferences, workshops etc. (people presenting 3L)

June:	Neutrino 06, Santa Fe (G. Raffelt) Virginia, USA (F. v. Feilitzsch)
August:	Hanoi Nufact 06 (A. Rubbia)
September:	Antineutrino Workshop in Berkeley (F. v. Feilitzsch) NDM06 Paris (G. Raffelt) NNN06 Seattle (J.E. Campagne) NOW06 Otranto (Katsanevas) Nuclear Physics in Zakopane

Working Groups

- aim: development of a working program for the design study
- foreseen are 1-2 pages summary with milestones and deliverables on each WG using the template for the design study
- re-arrangement of the groups

List of Working Groups

1. Tank Instrumentation
2. Underground Tanks
3. DAQ & Calibration
4. Cosmic Rays, Local Backgrounds, Materials
5. Sites
6. Liquids
7. Safety & Environment
8. Physics & Simulations

Next meeting

July 21 in Paris (Marie Curie)

List of Working Groups

WG 1: Tank Instrumentation

Coordinators: N. Spooner
R. Zimmermann
Members: A. Bueno
J. Pouthas
T. Marrodán Undagoitia
M. Wurm
Ch. de La Taille
J.-E. Campagne
A. Zalewska
List of items: light/charge detection
electronics
HV

WG 2: Underground Tanks

Coordinator: A. Rubbia
Members: L. Mosca
F. von Feilitzsch
List of items: design
geometry
support structure
materials
insulation
underground assembly

WG 3: DAQ & Calibration

Coordinator: C. Hagner
Members: N. Spooner
R. Zimmermann
S. Katsanevas
List of items: DAQ
data analysis
slow controls

WG 4: Cosmics, Local Backgrounds, Materials

Coordinator: T. Enqvist
Members: N. Spooner
V. Kudrgavtsov
J. Kisiel
L. Oberauer
J. Mietelski
B. Lefievre
List of items: in-situ measurements
external/internal background
simulations
coordination with ILIAS

WG 5: Sites

Coordinator: J. Peltoniemi
Members: N. Spooner
J. Kisiel
L. Mosca
A. Zalewska
A. de Bellefon
List of items: feasibility of large excavations
access, local conditions
site pre-selection

WG 6: Liquids

Coordinator: L. Oberauer
Members: A. Rubbia
M. Wurm
S. Schönert
N. Spooner
List of items: production
handling
purification
filling
long-term stability
gases

WG 7: Safety & Environment

Coordinator: L. Mosca
Members: N. Spooner
T. Enqvist
(W. Pytel)
List of items: infrastructure
risk analysis (earthquakes, fire, liquid
evaporation etc.)

WG 8: Physics & Simulations

Coordinator: J.E. Campagne
Members: L. Oberauer
J. Bouchez
A. Bueno
C. Hagner
T. Marrodán Undagoitia
J. Peltoniemi
A. Rubbia
N. Spooner
M. Wurm
R. Zimmermann
A. Tonazzo
M. Lindner
A. de Bellefon
List of items: physics potential