

(α ,n) yield in low background experiments

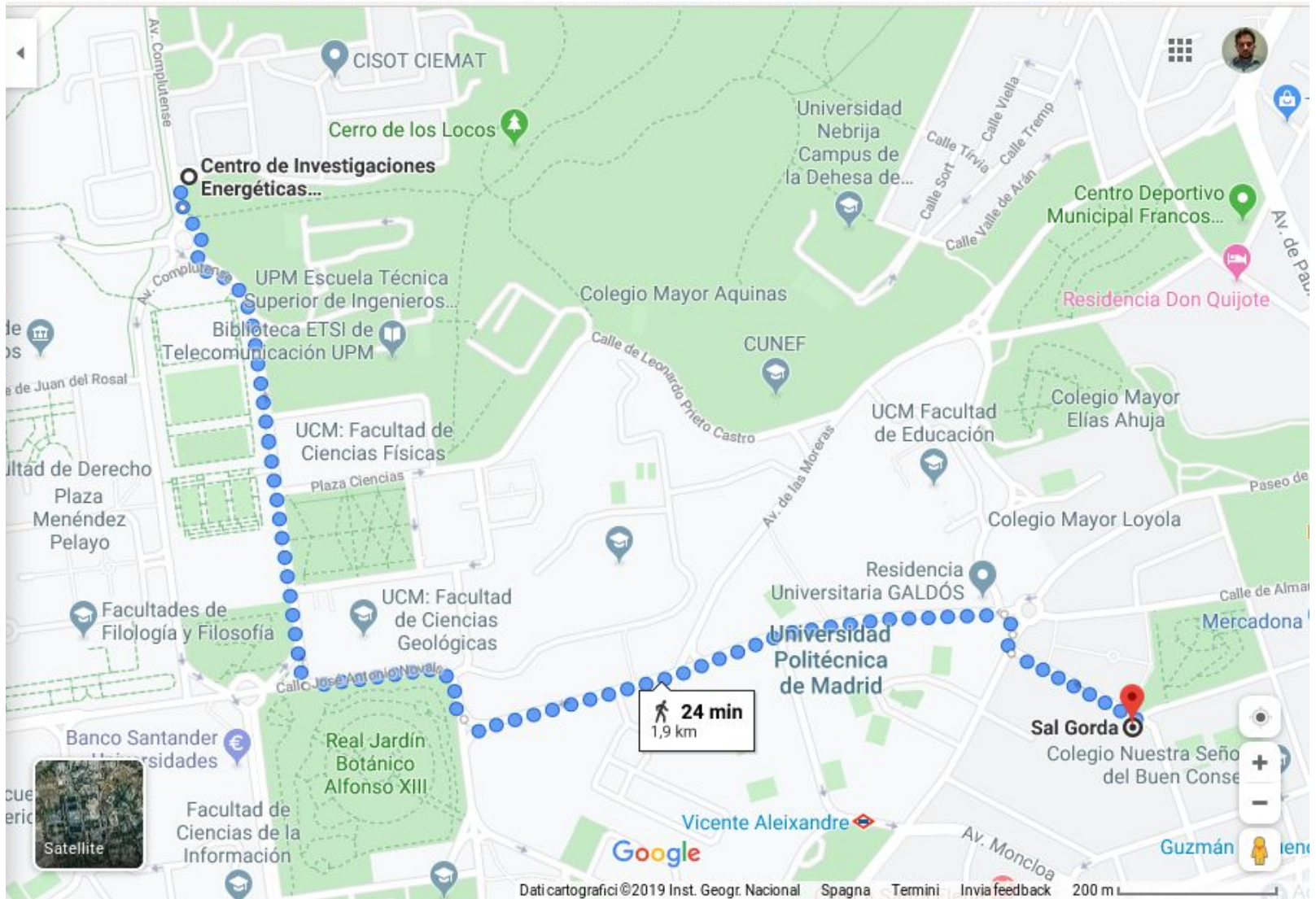
CIEMAT
21-22/Nov/2019



*Nuclear Innovation
Unit - CIEMAT*

General info

- Internet connection: eduroam + visitor
- <https://agenda.ciemat.es/event/1127/page/14-remote-connection> (pin: 232238)
- Today lunch at CIEMAT canteen.
- Photo before lunch (at the entrance of Blg 1)
- Tonight social dinner at “Restaurante Sal Gorda”
- Calle de Beatriz de Bobadilla, 9 (8.30PM)



Metro station: Guzmán El Bueno - Lines



(α,n) yield in low background experiments

- radiogenic neutrons from detector materials can be a source of background for several underground experiments
- review the needs of the next generation of low-background experiments
- present and compare the different techniques
- discuss new ideas and new approaches
- explore possible ways to measure the (α,n) cross section

	Introduction <i>Room B, building 1, CIEMAT</i>	<i>Dr Roberto Santorelli</i> 09:30 - 09:45
	DarkSide-50 <i>Room B, building 1, CIEMAT</i>	<i>Dr Shawn Westerdale</i> 09:45 - 10:00
10:00	DEAP-3600 /ArDM <i>Room B, building 1, CIEMAT</i>	<i>Dr Shawn Westerdale et al.</i> 10:00 - 10:15
	XENON-1T <i>Room B, building 1, CIEMAT</i>	<i>Dr Ramirez Diego</i> 10:15 - 10:30
	LZ <i>Room B, building 1, CIEMAT</i>	<i>Prof. Vitaly Kudryavtsev</i> 10:30 - 10:45
	CRESST <i>Room B, building 1, CIEMAT</i>	<i>Dr Alexander Fuss</i> 10:45 - 11:00
11:00	Coffe break <i>Room B, building 1, CIEMAT</i>	11:00 - 11:15
	nEXO <i>Room B, building 1, CIEMAT</i>	<i>Prof. Andrea Pocar</i> 11:15 - 11:30
	DUNE <i>Room B, building 1, CIEMAT</i>	<i>Prof. Robert Svoboda</i> 11:30 - 11:45
	SNO+ <i>Room B, building 1, CIEMAT</i>	<i>Dr Valentina Lozza</i> 11:45 - 12:00
12:00	SOURCES-4 <i>Room B, building 1, CIEMAT</i>	<i>Prof. Vitaly Kudryavtsev</i> 12:00 - 12:45
	Lunch	

14:00

Room B, building 1, CIEMAT

12:45 - 14:30

NEUCBOT

Dr Shawn Westerdale

15:00

Room B, building 1, CIEMAT

14:30 - 15:15

SaG4n

Dr Emilio Mendoza Cembranos

Room B, building 1, CIEMAT

15:15 - 16:00

16:00

Round table

Room B, building 1, CIEMAT

16:00 - 17:00

17:00

Coffe break

Room B, building 1, CIEMAT

17:00 - 17:20

Round table

Room B, building 1, CIEMAT

17:20 - 18:00

18:00

09:00	Summary of the first day <i>Room B, building 1, CIEMAT</i>	09:00 - 09:30
	New (alpha, n) measurements for underground experiments <i>Room B, building 1, CIEMAT</i>	<i>Daniel Cano Ott</i> 09:30 - 10:00
10:00	BELEN, a high efficiency neutron detector for (alpha,n) yield measurements <i>Room B, building 1, CIEMAT</i>	<i>Dr Ariel Tarifeño</i> 10:00 - 10:30
	Neutron background measurements at the Laboratorio Subterráneo de Canfranc <i>Room B, building 1, CIEMAT</i>	<i>Dr José Luis Tain</i> 10:30 - 11:00
11:00	Coffe break <i>Room B, building 1, CIEMAT</i>	11:00 - 11:20
	Nuclear physics at the Centro Nacional de Aceleradores (CNA) <i>Room B, building 1, CIEMAT</i>	<i>Dr Carlos Guerrero</i> 11:20 - 11:40
	Nuclear physics at the Centro de Microanálisis de Materiales (CMAM) <i>Room B, building 1, CIEMAT</i>	<i>Prof. Olof Tengblad</i> 11:40 - 12:00
12:00	Conclusions <i>Room B, building 1, CIEMAT</i>	12:00 - 12:30

Please send the slides to: vicente.pesudo@ciemat.es

Goals of this workshop:

- to put together experts in this field
- to establish new links in the community of the underground experiments
- connect particle and nuclear physicists
- discuss common interests. Synergies?
- possibly making common plans for the future