

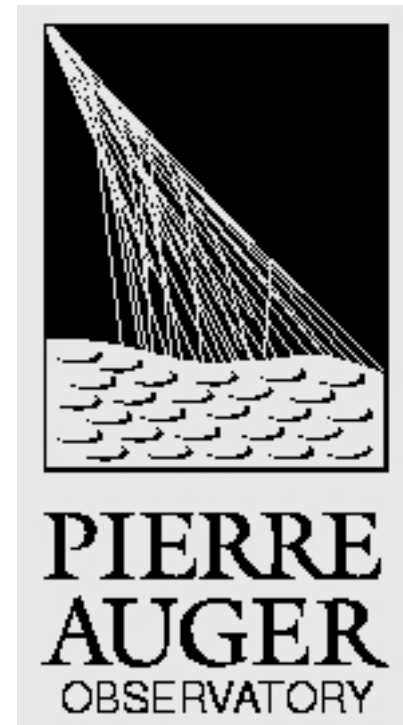
Italian Activities in AUGER

R.Mussa

The early years

Torino SD and FD activities

Argentina scientists in Torino



CONICET



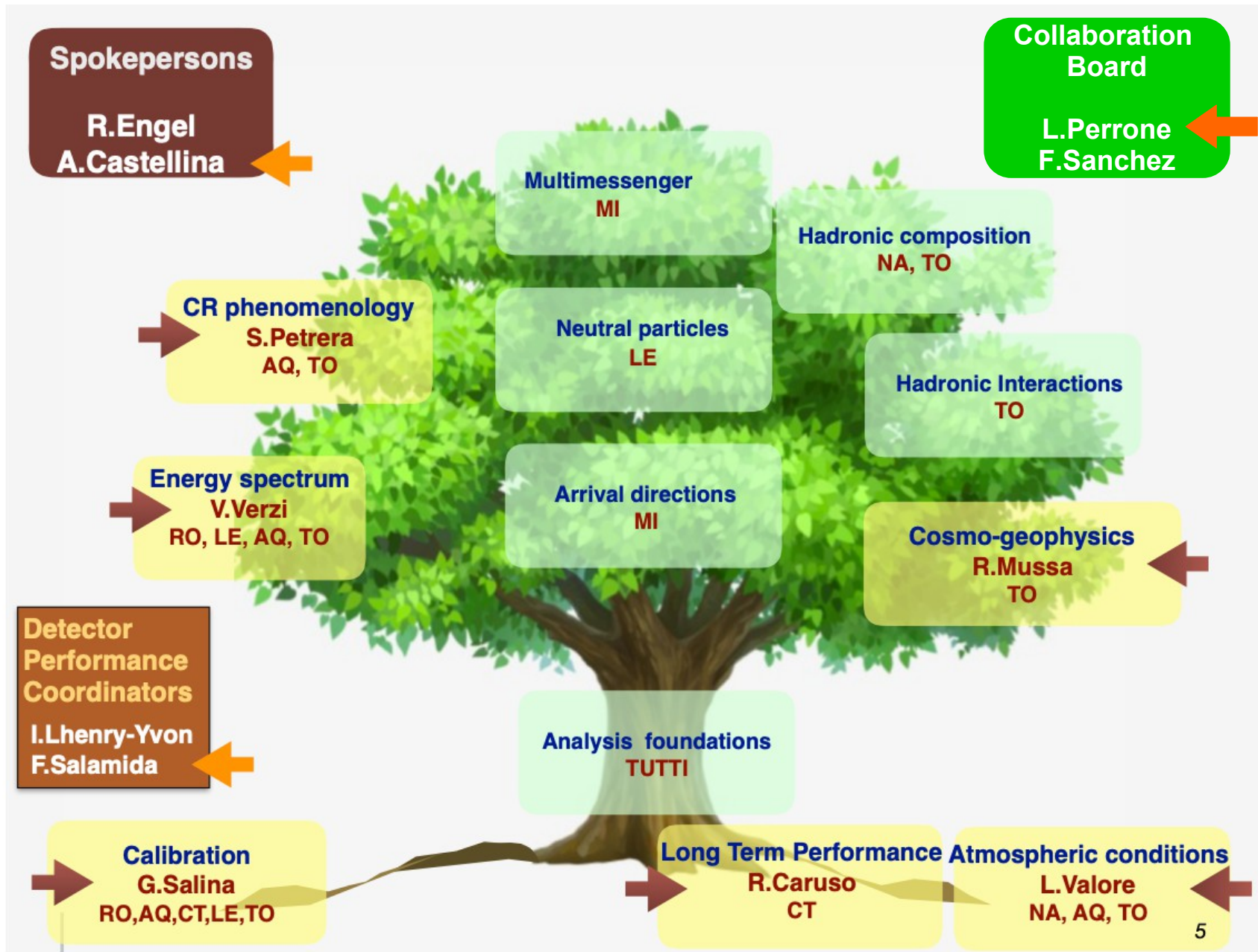
1997: AUGER @ CERN



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Italy in Auger



Torino in AUGER SD: hardware

Design and Production of Large PMT bases

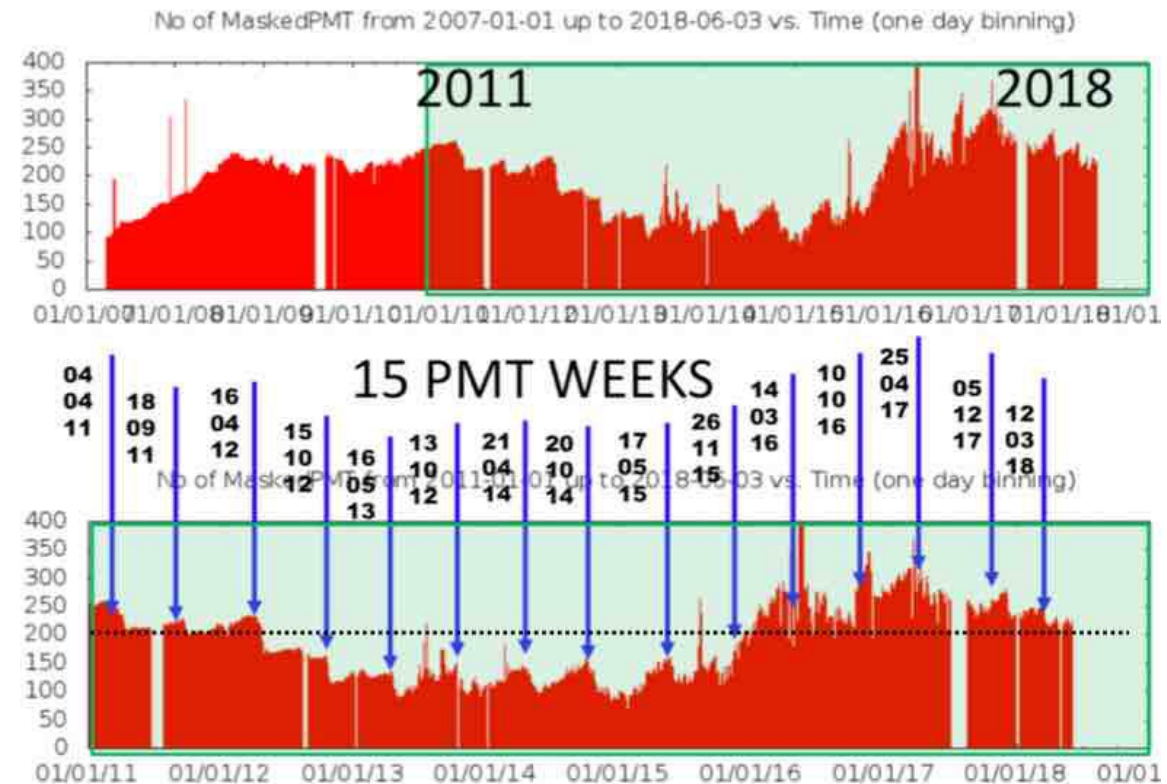
Test Bench for HVPS of the LPMTs

PMTs linearity measurements in the field

Maintenance of LPMTs + bases

Production of modules for AMIGA
underground muon detectors

Small PMT: design, production, HV



Torino in AUGER SD: hardware

Design and Production of Large PMT bases

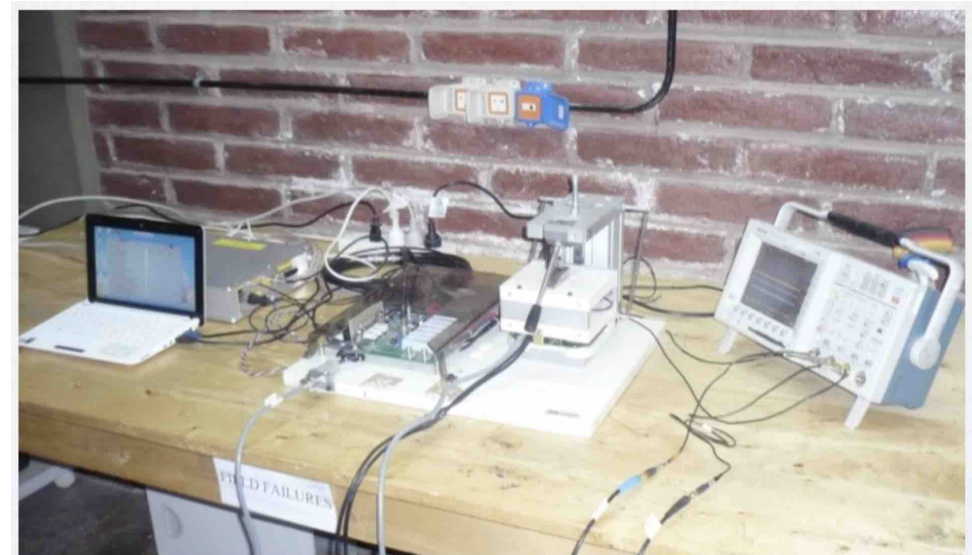
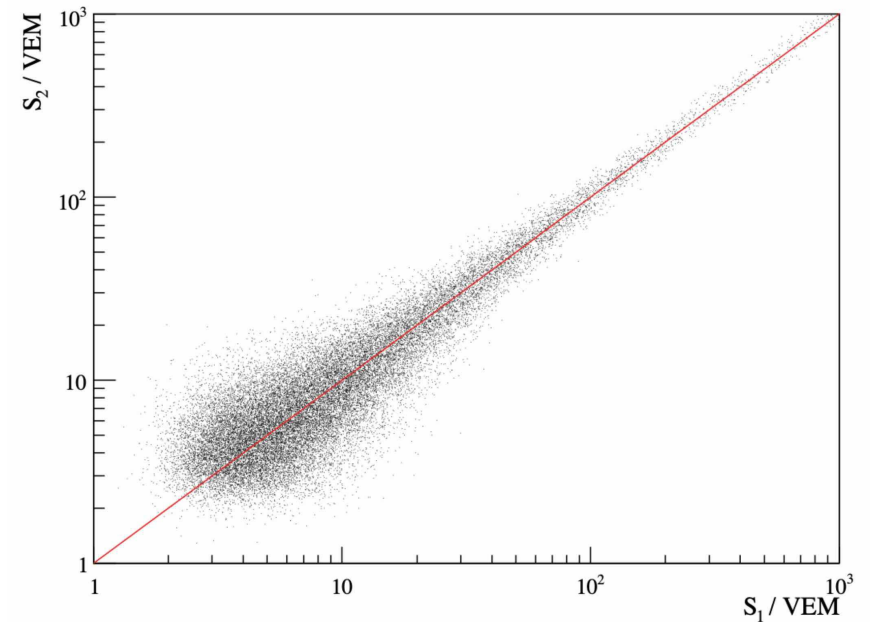
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Torino in AUGER SD: SW & analysis

Study and definition of T2-T5 triggers

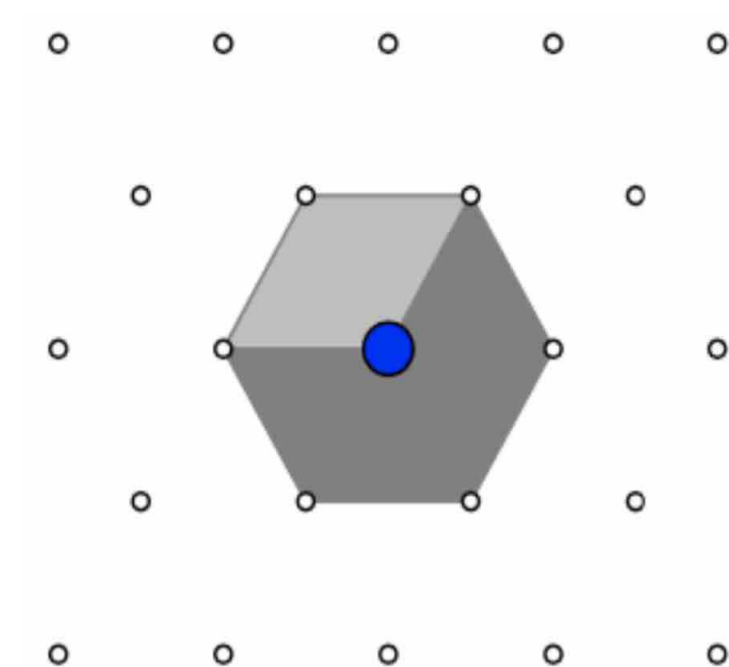
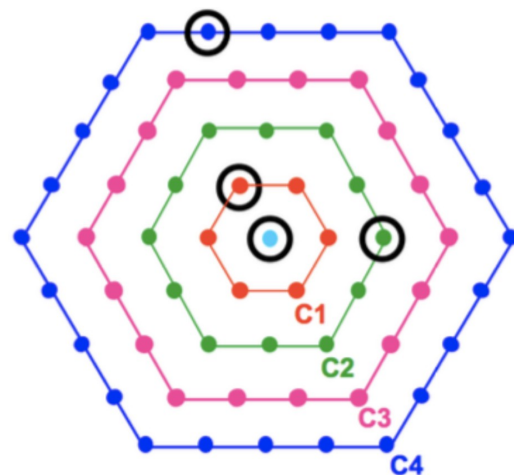
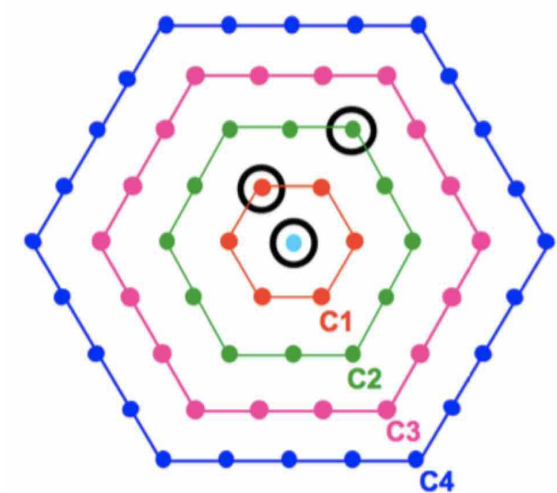
Study of signal accuracy (twin tanks)

Study of e/mu separation in tank signals

Signal saturations in tanks and recovery procedure

Anisotropy studies: the EW method

Spectrum+Composition combined fits



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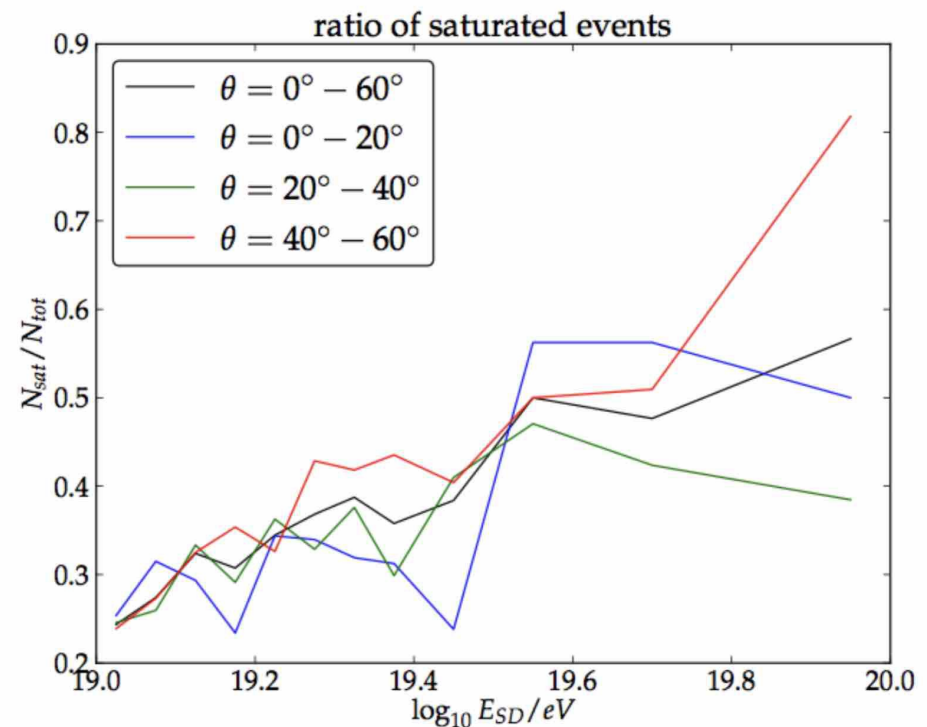
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Torino in AUGER SD: hardware

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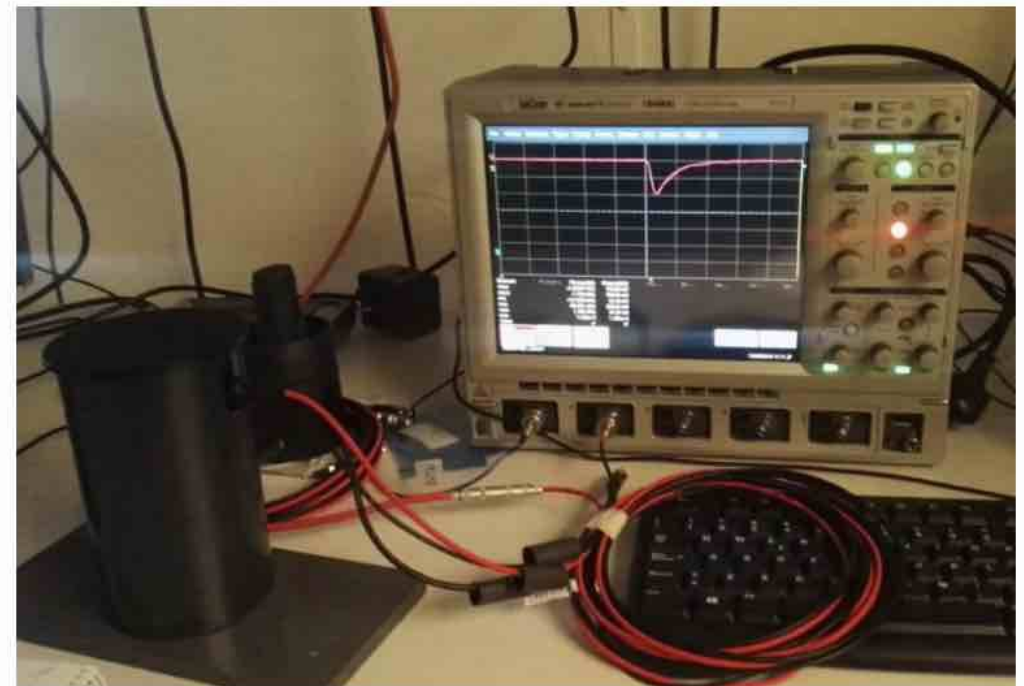
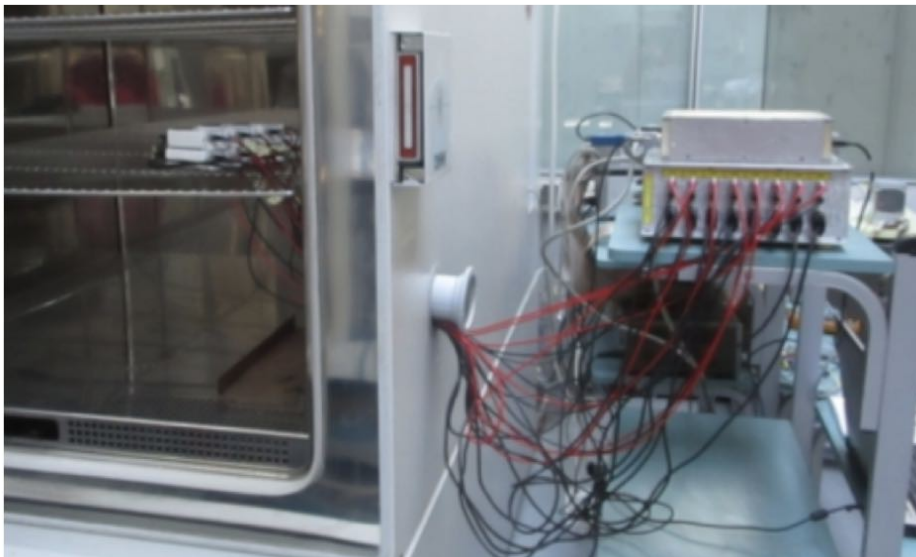
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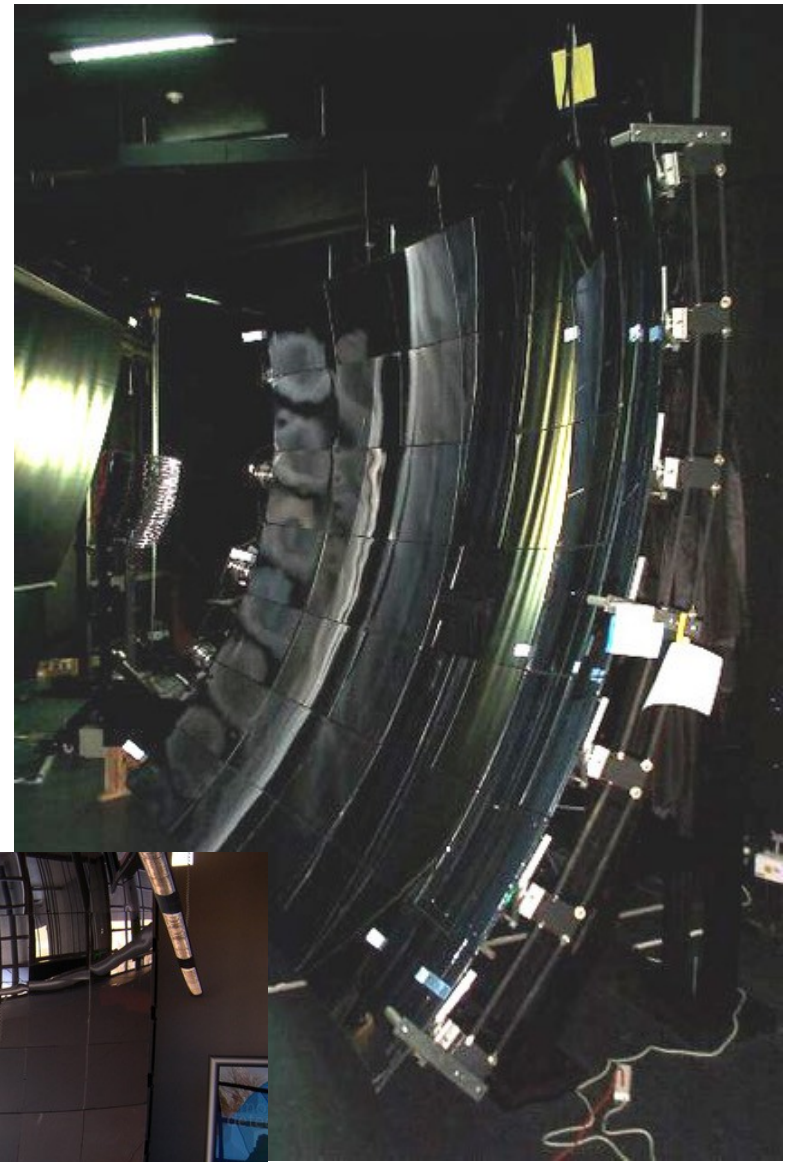
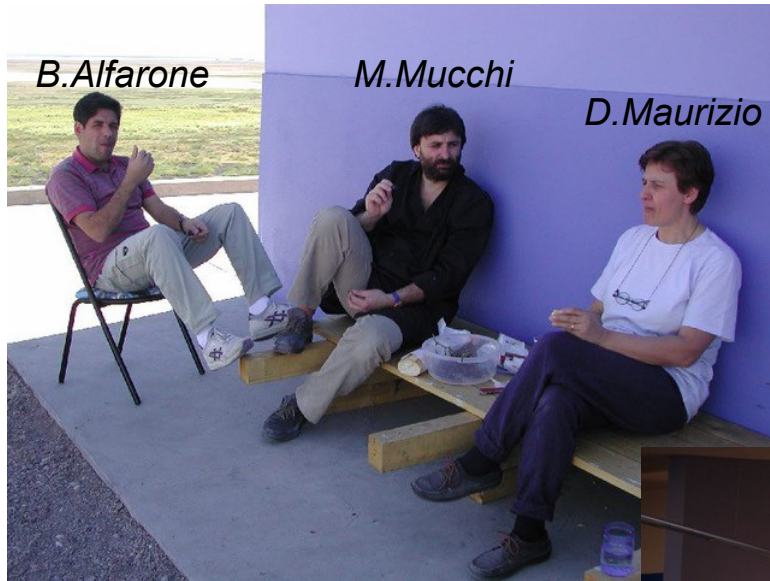


Argentina Scientists involved in Torino activities



Torino in AUGER FD

Prototype Mirror in Engineering Array



Torino in AUGER FD

Prototype Mirror in Engineering Array

Auger Offline Code Framework



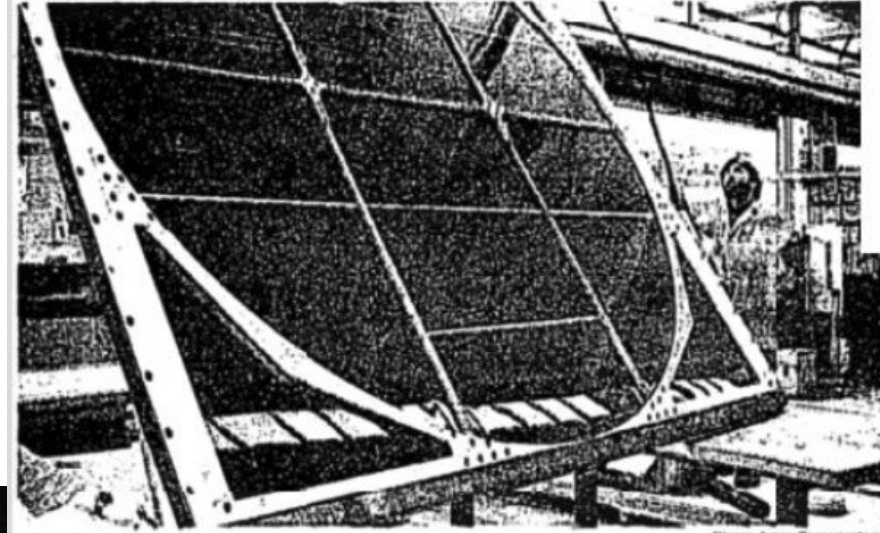
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Prototype Mirror in Engineering Array

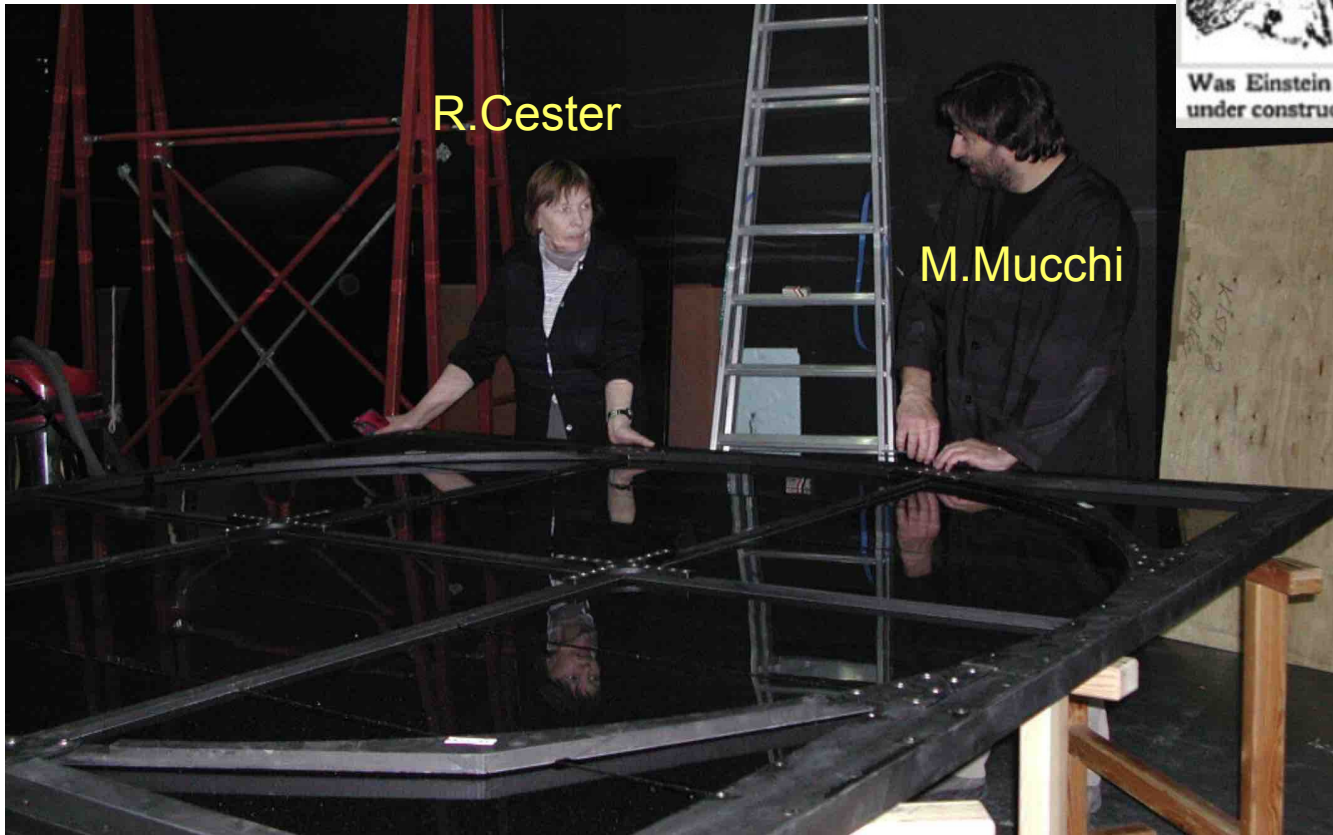
Auger Offline

Design, production and installation of UV Filters

Interpreting the Cosmic Rays



Pierre Auger Observatory
Was Einstein wrong? The answer may come from the Pierre Auger Observatory under construction in Argentina. Above, technicians adjust the housing for a telescope.



R.Cester

M.Mucchi

M.Mucchi on New York Times, 31/12/2002

Torino in AUGER FD

Prototype Mirror in Engineering Array

Auger Offline

Design, production and installation of UV Filters

FD Electronics: Design, tests and production of Analog Boards



Torino in AUGER FD

Prototype Mirror in Engineering Array

Auger Offline

Design, production and installation of UV Filters

FD Electronics: Design, tests and production of Analog Boards

Atmospheric monitoring: LIDAR Network design, installation, operation, maintenance

Cosmogeophysics: Elves and Lightning, Space Weather

EAS-TOP Telescopes : from Gran Sasso...



... to Pino Torinese ...

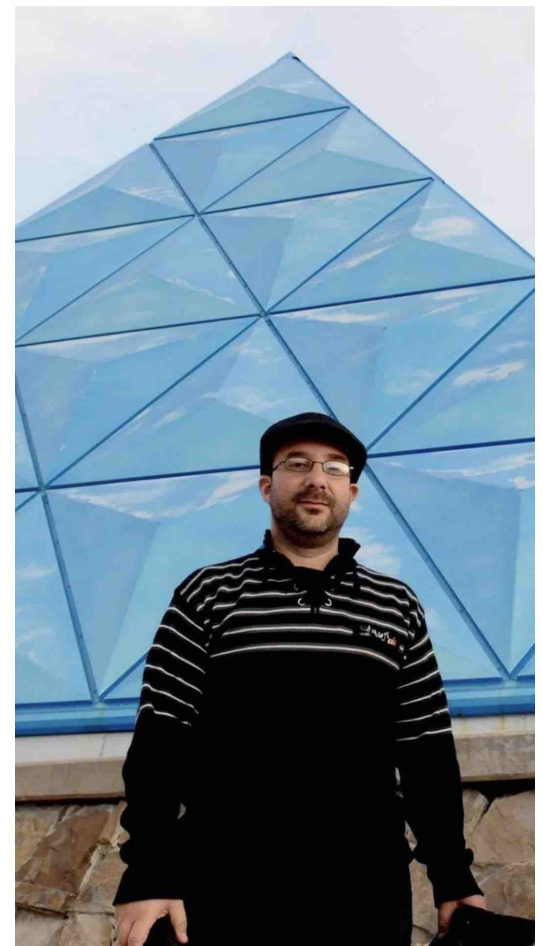


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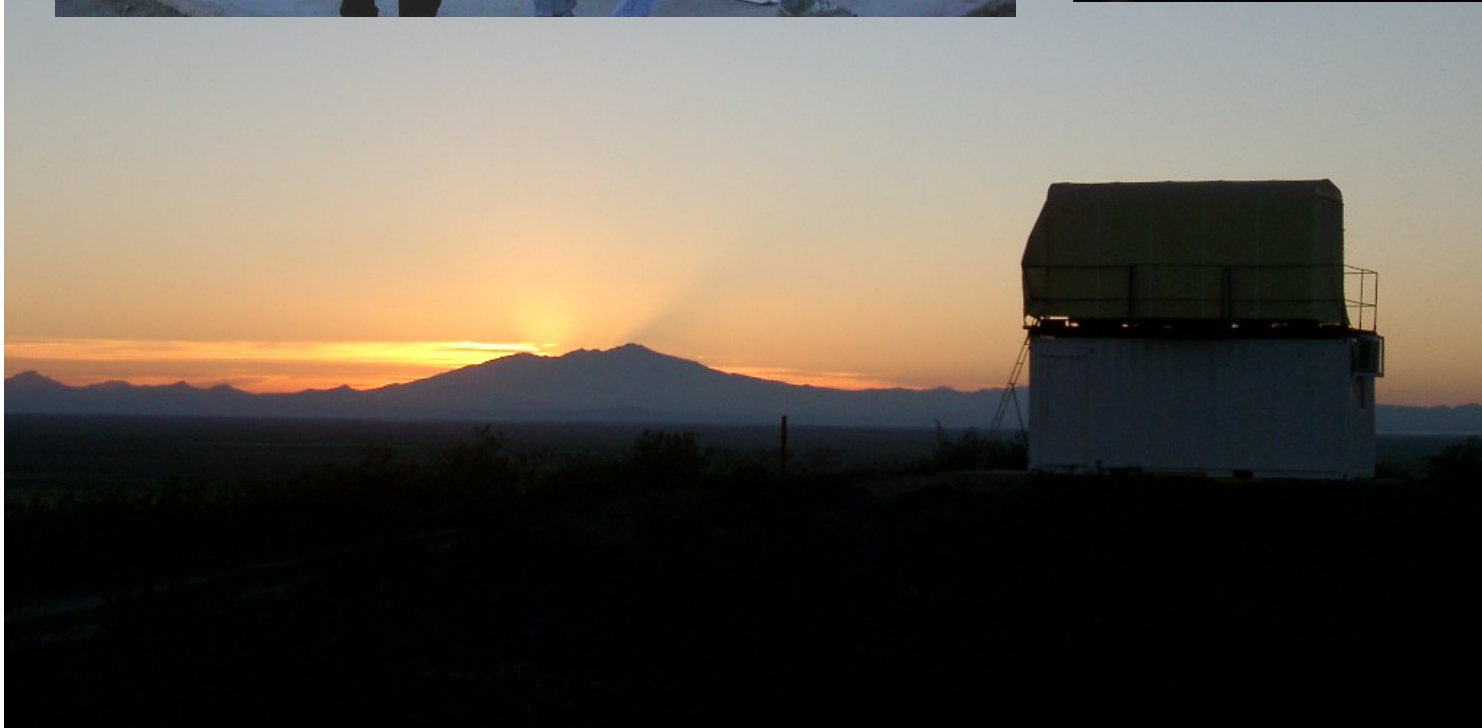
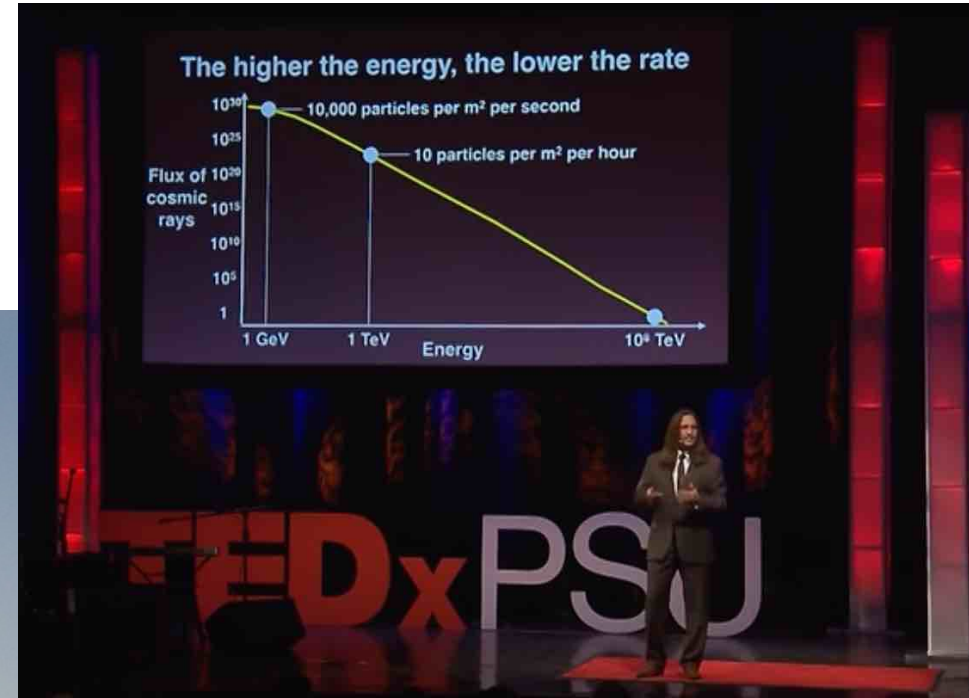
First days of the LIDAR Network

A.Risi M.Mostafa



... when we realised that the cover will not have lasted too long ...

First days of the LIDAR Network



... when we realised that the cover will not have lasted too long ...

Argentina Scientists involved in Torino activities

M. Mostafa

A. Rizi

M. Santander

J. Rodriguez

G. Sequeiros

D. Melo

J. Martinez

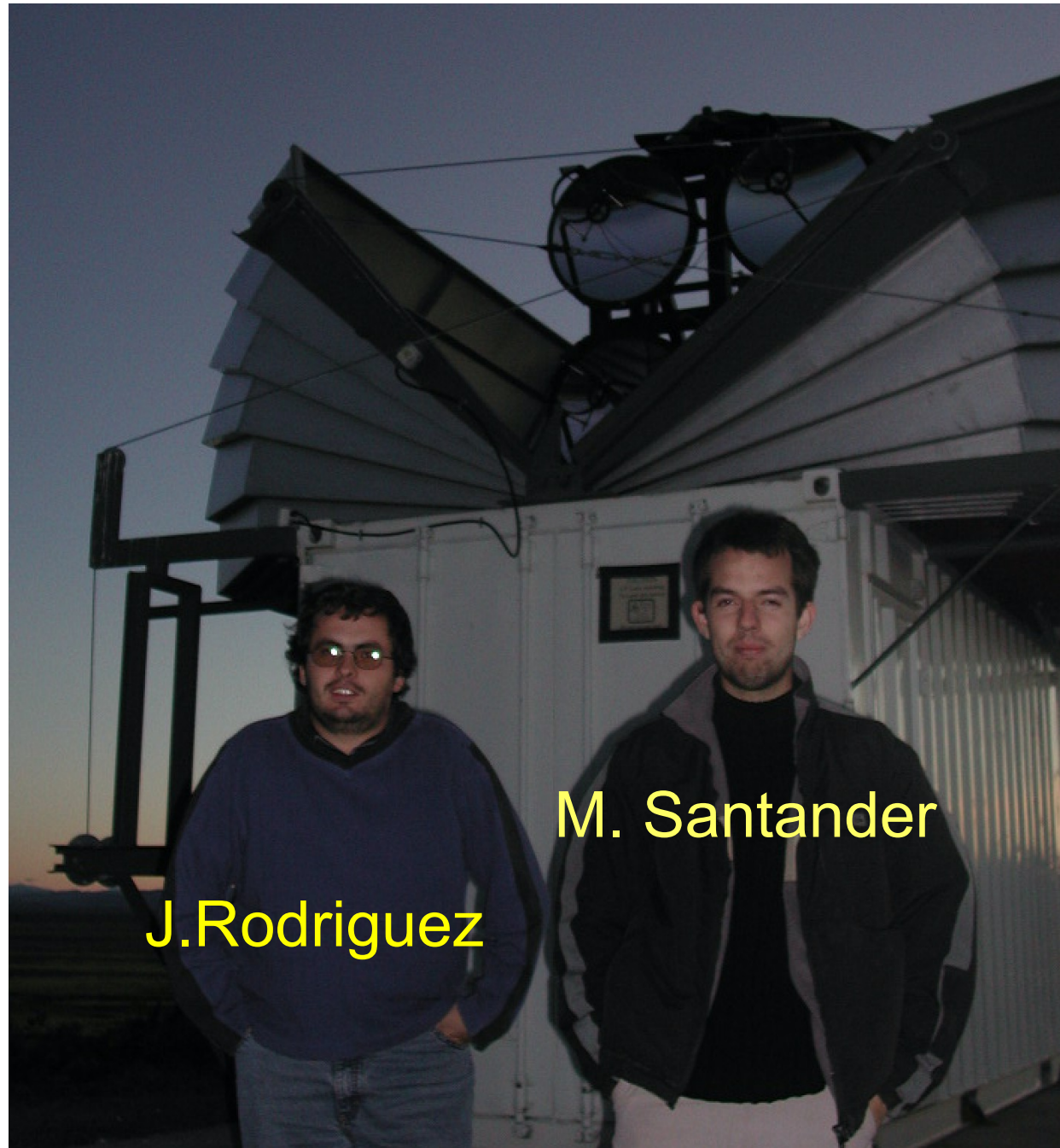
J. Pallotta

P. Bauleo

A. Lucero

I. Sidelnik

F. Suarez



J. Rodriguez

M. Santander

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Torino in AUGER FD

Prototype Mirror in Engineering Array

Auger Offline

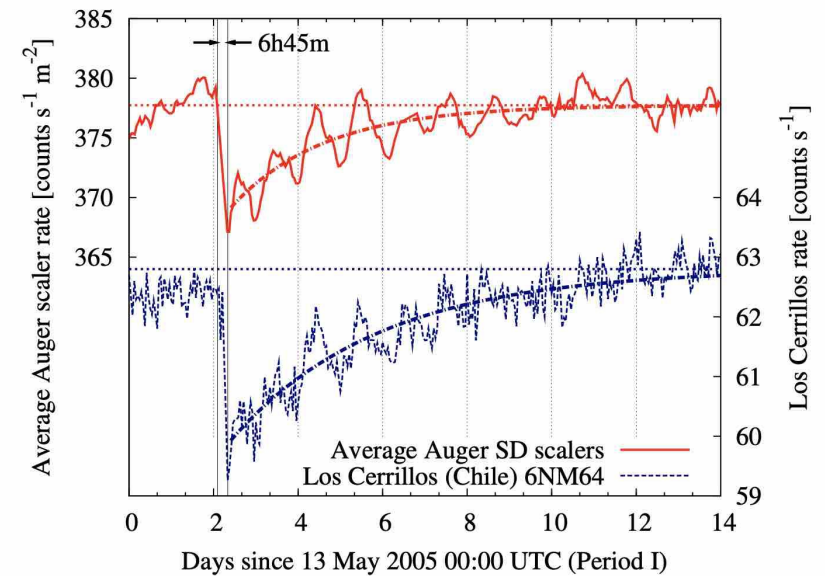
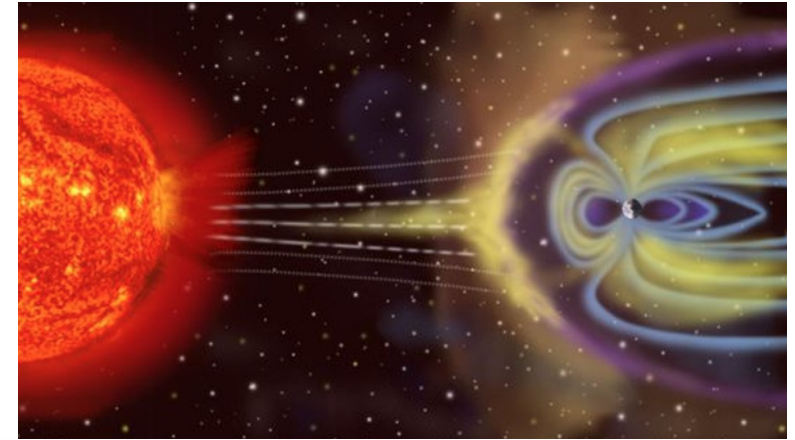
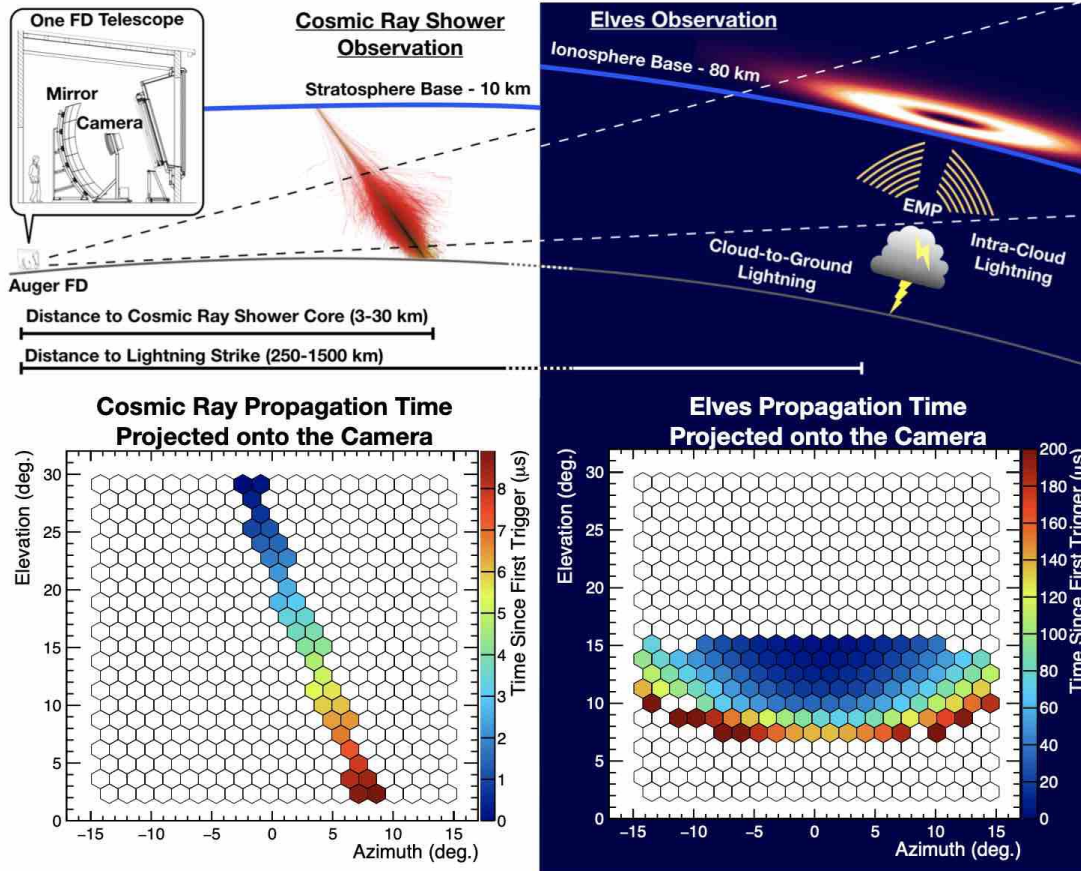
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FD Electronics: Design, tests and production of Analog Boards

Atmospheric monitoring: LIDAR Network design, installation, operation, maintenance

Cosmogeophysics: Elves and Lightning, Space Weather

Cosmogeophysics: ELVES, Solar Weather



ELVES and TLE: RM, G.Ciaccio, A.Tonachini, C.Maiorana, A.Vasquez, E.Arnone, G.Nicora

Solar activity in SD scalers: C.Taricco

Muchas
Gracias!



Responsibilities in Torino

A.Castellina: co-spokesperson, SPMT project manager

M.Aglietta: SD PMT maintenance , SPMT+HVPS WP responsible person

F.Fenu: Spectrum Task Leader

R. Mussa: Lidar Network Task Leader, Cosmogeophysics Task Leader

G.A.Anastasi: SD Performance Monitoring

Past responsibilities:

W.Fulgione, C.Morello: SD PMT maintenance responsible persons

G.Navarra: SD reconstruction, PMT saturations

E. Menichetti: FD electronics

A.Castellina: SD reconstruction

S. Maldera : PMT saturations

Site Surveys

C.Morello

G.Navarra



Coihueco , Feb 2003



A.Tonachini R.Cester

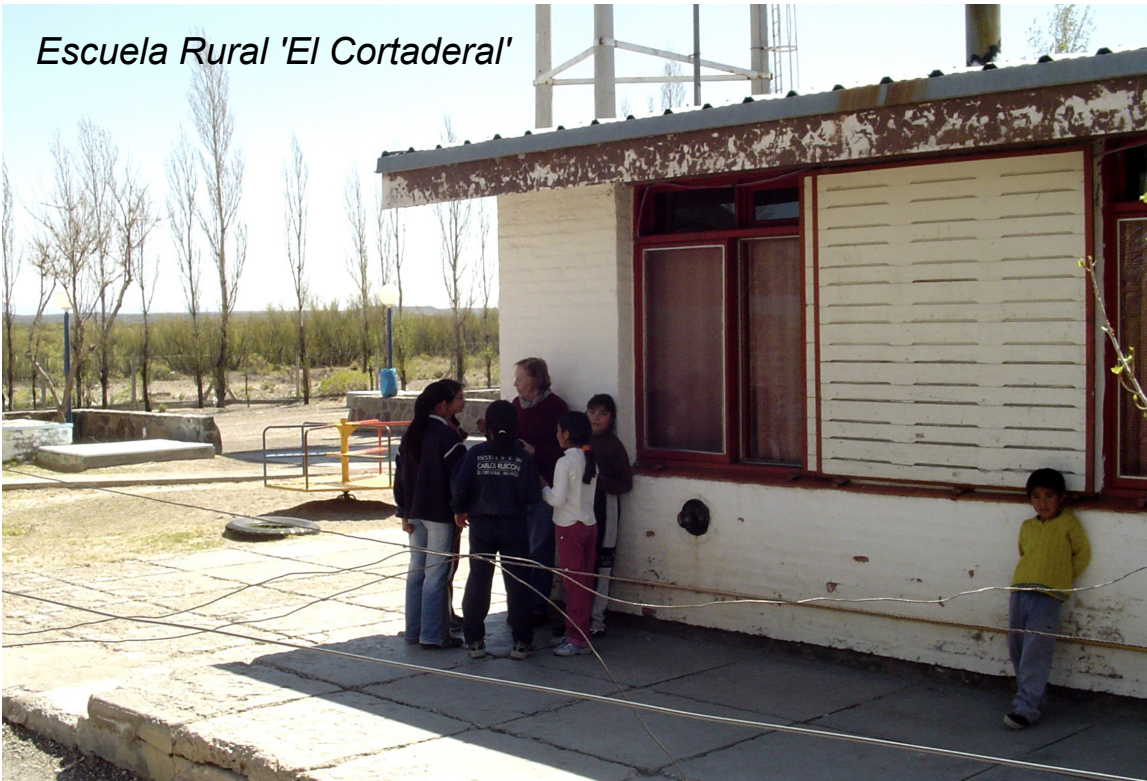
Los Morados , May 2003

Social activities



Malargüe Parade Nov. 16

Escuela Rural 'El Cortaderal'



Inauguration of the last FD building

