Welcome to everybody !!
RICAP 2009
very timely conference

• ~ 3 years from PAMELA launch

• Launched in orbit on June 15, 2006, on board of the DK1 satellite by a Soyuz rocket from the Bajkonour cosmodrom.
Perfect launch of the AGILE satellite by ISRO from the SHAR base (Chennai), India,
April 23, 2007
~ 1 year from Fermi launch

11 June 2008
• no new launch this year?
Creation, acceleration, injection

Underground, Under-ice, Underwater

Extensive Air Shower Detectors

Direct detection

Particle Astrophysics Experiments

Cosmic rays: about 10 Myears in the Galaxy (6-7 g/cm²)

Cosmic Rays

Propagation

Modulation

Further acceleration?

Balloons ~ 40 km

~3 g/cm² residual atmosphere

Space experiments ~ 400 km

High Mountain Detectors

Cherenkov Detectors

Particle Accelerators

Source

γ

ν

Atmosphere

40 km

23 Xo

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creation acceleration injection

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ARGO-JBJ
Milagro

Fermi
PAMELA
AGILE
AMS

KASCADE Grande
DECOR
AUGER
NEMO
ANTARES
IceCube

MAGIC
HESS
so again

Welcome to everybody !!