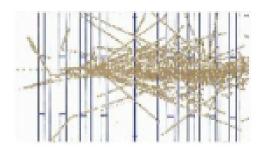
## **Calor 2008**



Contribution ID: 97

Type: oral presentation

## The Mini-Calorimeter onboard AGILE: the first year in space

Wednesday, 28 May 2008 12:20 (20 minutes)

## Summary

AGILE, the Italian space mission dedicated to gamma and hard-X astrophysics, was succesfully launched on 23 April 2007 and is currently fully operative. The Mini-Calorimeter (MCAL) onboard the AGILE satellite is a scintillation detector made of 20 kg of segmented CsI(TI) scintillators with photodiode readout with a total geometrical area of 1400 cm2. MCAL can work both as a slave of the AGILE Silicon tracker and as an independent detector for gamma-ray bursts (GRB) detection in the 300 keV - 200 MeV energy range. Despite its limited thickness, due to weight constraints, MCAL has proven to succesfully self-trigger GRBs at MeV energies providing photon-by-photon data with less than 2 microsec time resolution and almost all-sky detection capabilities. The MCAL design and characteristics, as well as the inflight performance after one year of operation in space and the scientific results obtained so far will be reviewed and discussed.

Primary author: Dr MARISALDI, Martino (INAF-IASF Bologna)

**Co-authors:** TROIS, Alessio (INAF-IASF Roma); ARGAN, Andrea (INAF-IASF Roma); BULGARELLI, Andrea (INAF-IASF Bologna); Dr LABANTI, Claudio (INAF-IASF Bologna); FUSCHINO, Fabio (INAF-IASF Bologna); GI-ANOTTI, Fulvio (INAF-IASF Bologna); DI COCCO, Guido (INAF-IASF Bologna); GALLI, Marcello (ENEA); Prof. TAVANI, Marco (INAF-IASF Roma); TRIFOGLIO, Massimo (INAF-IASF Bologna)

Presenter: Dr MARISALDI, Martino (INAF-IASF Bologna)

Session Classification: Astrophysics and neutrinos

Track Classification: Astrophysics and neutrinos