Programma Nazionale di Ricerche in Antartide (PNRA)

Final project report

Project ID: 2002/7.11
Title: BaR-SPort

Principal investigator: Dott. Stefano Cortiglioni
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Duration: 2 years
Assigned funding: 22.087,50 €

Activities and results

The main activities, according to the proposal, were related to:

- Study and development of specific sensors suitable for LDB operations in Antarctic regions
- Update of the experiment control electronics to (polar) LDB requirements
- Update of the experiment mechanics to (polar) LDB requirements
- Study and development of observational methods suitable for (polar) LDB
- Ground observations of sky regions to be selected for deep survey of Cosmic Background Polarization onboard LDB

In addition, we have realized a new Telemetry&Telecommand module able to manage balloon and ground experiments in Polar regions. It works by using the Iridium satellite communication system and can be used everywhere without any special infrastructures.

Products

A – papers in scientific magazines
1. G. Bernardi, E. Carretti, R.J. Sault, S. Cortiglioni, S. Poppi, 1.4 GHz polarimetric observations of the two fields imaged by the DASI experiment MNJAS submitted, 00, 000-000 (2006)

B – book chapters
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C - proceedings of international conferences


D – proceedings of national meetings and conferences

E – thematic maps

F – patents, prototypes and data bases

G – exhibits, organization of conferences, editing and similar

H - formation (PhD thesis, research fellowships, etc.)

Research units

• INAF-IASF Bologna
• INAF-IASF Milano
• INAF-IASF Palermo
• INAF-IRA Bologna
• CNR-IEIIT Torino
• CNR-IFAC Firenze
• Università di Milano-Bicocca
• Università di Firenze
• Università di Roma-La Sapienza

Date: 27/03/2009

Notes