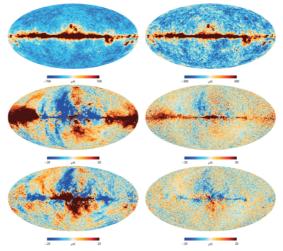


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RADIOFOREGROUNDS SECOND

DISSEMINATION REPORT (2017)









Dissemination Report 2 (Month 24)

INTRODUCTION

RADIOFOREGROUNDS project dissemination is progressing adequately during the second year, with a constant flow of information spread through a range of different channels such as the traditional journal publications and academic conference presentations together with external events, media stories and international presentations.

1.GENERAL FRAMEWORK OF THE DISSEMINATION AND COMMUNICATION ACTIVITIES

1.1 Objectives

RADIOFOREGROUNDS project communication objectives are:

- Raise public awareness and ensure maximum visibility of the project key facts, objectives, activities and findings among EU public at large;
- Announce and promote RADIOFOREGROUNDS events, contributing to upgrade its attendance and engagement potential;
- Support the dissemination objectives;

Communication has therefore contributed to the support of the dissemination and exploitation objectives while targeting stakeholders beyond dissemination and exploitation purposes such as the public at large comprising civil society at large.

Dissemination: "The public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium."

On the other side, the dissemination of the project outputs to key stakeholders has aimed at making the knowledge (results) developed through the project available to the widest audience and enhancing the project exploitation potential.

1.2 Stakeholders

RADIOFOREGROUNDS has reached the following groups of stakeholders for communication and dissemination activities:



REACHED AUDIENCES		ROLE	RELATED WP		
Mass media	National and International media	To attract the interest of mass media for Cosmology as a hot topic in Astrophysics.	WP1		
Students	 Primary and Secondary School 	General knowledge on astrophysics.			
RADIOFORE GROUNDS Consortium	 RADIOFOREGROUNDS partners 	Coordinate and ensure smooth implementation of the project activities in their respective countries.	WP1		
Astrophysics Community	 Cosmology groups and astrophysics community at large 	term research collaboration.	WP2-6		
WIDER AUDIENCES (reached through communication, for awareness purposes)					
General Public European civil citizens and the civil society at large					

Table 1. RADIOFOREGROUNDS dissemination reached audiences, roles and related WPs

2. COMMUNICATION AND DISSEMINATION ACTIVITIES

The public and updated information of the dissemination activities within the scientific community can be found in the web page of the project: <u>http://www.radioforegrounds.eu/</u>. Here we include the status at the end of year 2 of the project.

At month 24 the following communication and dissemination activities have been carried out. Following the Dissemination Plan we divide them in tools and channels:

2.1 Communication and Dissemination Tools

2.1.1 Distribution of Brochure

The RADIOFOREGROUNDS brochure presented a general overview of the main scientific objectives of the project, within a broad context related to the QUIJOTE Experiment and Planck Mission. This brochure, prepared during the first year of the project, has been distributed online through the website and social networks under the form of clear and appealing info-graphics (as .pdf files). More than 500 printed copies are also available to be handed out at each event RADIOFOREGROUNDS partners participate in.





2.1.2 Media Articles

Media articles make reference to all types of written press articles focusing on presenting the project, its activities, its outcomes, etc., that are published on different channels. They may take the form of news, presentations, announcements, tweets, posts, press releases, published on the project website, on external websites including partners' websites, on social networks, etc.

Presentations of results (http://www.radioforegrounds.eu/pages/presentations.php).

We include here the list of meetings where we have presented the RADIOFOREGROUNDS project during the second year of the project, separated by the speaker in each case:

C. Baccigalupi (SISSA):

- i. <u>Diffuse Foregrounds</u>, First ASI-COSMOS collaboration meeting, Bologna, January 20th, 2017.
- ii. <u>Polarized low frequency foregrounds</u>. CMB foregrounds workshop. University of California, San Diego. November 29 December 1, 2017.

R.B. Barreiro (UC):

i. <u>The QUIJOTE CMB experiment</u>. B-mode from space Workshop 2017, Berkeley, December 4-6, 2017.





<u>Component separation on CMB.</u> Cosmology School in the Canary Islands. Fuerteventura, Spain, September 18-22, 2017.

J.A. Rubiño-Martín (IAC):

i. <u>The QUIJOTE experiment: project status and first</u> <u>results</u>. Meeting on Fundamental Cosmology. Teruel, September 11-13, 2017.

ii. <u>Theory of CMB polarization, and status of CMB</u> <u>observations</u>. Cosmology School in the Canary Islands. Fuerteventura, September 18-22, 2017.

ii. <u>CMB experiments at European sites</u>. Towards the European coordination of the CMB programme. Florence, September 2017.

V. Pelgrims (Grenoble):

i. <u>Extreme-scale alignments of quasar optical</u> <u>polarizations and Galactic dust contamination</u>. Submm/mm/cm QUESO Workshop 2017 (QUESO2017), ESO, Garching, Germany, October 25 -27, 2017.

F. Vansyngel (IAC):

i. <u>First scientific results from QUIJOTE</u>. CMB foregrounds workshop. University of California, San Diego. November 29 - December 1, 2017.

2.1.3 Other Specific Tools. RADIOFOREGROUNDS rollup

A RADIOFOREGROUNDS rollup was prepared during the second year of the project. It was based on the same design as the brochure, and it presented a general overview of the main scientific objectives of the project. The rollup has been used during this year in public outreach activities (e.g. Open-days at Teide Observatory) and also in RADIOFOREGROUNDS meetings.





2.2 Communication and Dissemination Channels

2.2.1 Publications in Scientific Journals

Accepted:

 QUIJOTE scientific results - II. Polarisation measurements of the microwave emission in the Galactic molecular complexes W43 and W47 and supernova remnant W44. Génova-Santos, R., Rubiño-Martín, J. A., Peláez-Santos, A., Poidevin, F., Rebolo, R., Vignaga, R., Artal, E., Harper, S., Hoyland, R., Lasenby, A., Martínez-González, E., Piccirillo, L., Tramonte, D., Watson, R. A. Monthly Notices of the Royal Astronomical Society 2017, 464 4107-4132.

• On the regularity of the covariance matrix of a discretized scalar field on the sphere. *Bilbao-Ahedo, J. D., Barreiro, R. B., Herranz, D., Vielva, P., Martínez-González, E.* Journal of Cosmology and Astroparticle Physics 2017, **2** 022.

• <u>Making maps of Cosmic Microwave Background polarization for B-mode</u> <u>studies: the POLARBEAR example</u>. *Poletti, D. et al.* Astronomy & Astrophysics 2017, **600** A60.

• <u>A 3D model for carbon monoxide molecular line emission as a potential cosmic</u> <u>microwave background polarization contaminant</u>. *Puglisi, G., Fabbian, G., Baccigalupi, C.* Monthly Notices of the Royal Astronomical Society 2017, **469** 2982-2996.

• Galaxy Evolution in the Radio Band: The Role of Star-forming Galaxies and Active Galactic Nuclei. Mancuso, C., Lapi, A., Prandoni, I., Obi, I., Gonzalez-Nuevo, J., Perrotta, F., Bressan, A., Celotti, A., Danese, L. Astrophysical Journal 2017, **842** 95.

• <u>Performance of a continuously rotating half-wave plate on the POLARBEAR</u> <u>telescope</u>. *Takakura, S. et al.* Journal of Cosmology and Astroparticle Physics 2017, **5** 008.

Submitted:

• <u>Cosmological-scale coherent orientations of guasar optical polarization vectors</u> in the Planck era Surviving to Galactic dust contamination scenario. *Pelgrims, V.* ArXiv e-prints 2017, submitted to A&A.

• <u>Modelling the UV to radio SEDs of nearby star-forming galaxies: new Parsec SSP</u> <u>for Grasil</u>. Obi, I. A., Bressan, A., Perrotta, F., Silva, L., Vega, O., Chen, Y., Lapi, A., Mancuso, C., Girardi, L., Granato, G. L., Marigo, P., Slemer, A. ArXiv e-prints 2017.

• Exploring Cosmic Origins with CORE: B-mode Component Separation. *Remazeilles, M. et al.* ArXiv e-prints 2017.

• Forecasting Polarized Radio Sources for CMB observations. Puglisi, G., Galluzzi, V., Bonavera, L., Gonzalez-Nuevo, J., Lapi, A., Massardi, M., Perrotta, F., Baccigalupi, C., Celotti, A., Danese, L. ArXiv e-prints 2017.



Proceedings:

• <u>The QUIJOTE experiment: project status and first scientific results</u>. *Rubiño-Martín, J. A. et al.* Highlights on Spanish Astrophysics IX 2017, 99-107

2.2.2 External Events

During 2017 IAC also celebrated the Open Days at the Teide Observatory (Tenerife) to bring astronomy to the general public. As part of the activities, we included tailored visits to the QUIJOTE experiment to disseminate the results and importance of RADIOFOREGROUNDS project.

A selection of pictures from several outreach events during 2017, including visits to the QUIJOTE telescopes, is included here:





3. REACHED AUDIENCES

	Policy Makers, Regulatory Authorities	Industry	Astrophysics Community	General Public
Tools				
Brochure - Generalist	1	1	1	1
Brochure – Thematic, topic specific	 ✓ 	✓	1	1
Media articles - Generalist	1	✓	1	1
Media articles – Specialised, targeted, scientific	1	✓	1	
Email blasts – Topic specific	1	1	1	
Channels			•	
Project Website	 ✓ 	1	1	1
Mailing lists & Contact databases	1	✓	1	
Social Media	 ✓ 	1	1	1
External Events - Outreach				1
Publications in Scientific Journals		✓	1	