International School of Space Science
L'AQUILA - ITALY

Examples of Successful Proposals

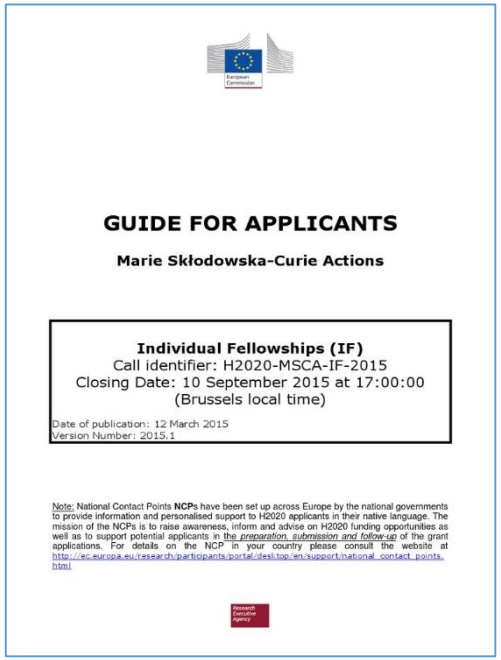
Lucilla Alfonsi
Istituto Nazionale di Geofisica e Vulcanologia

INGV

How to maximize the probability to be approved?

- ✓ Your idea **must fit** the call
- ✓ Be **compliant** with the Guide for Applicants
- ✓ Form a **good Consortium**
- ✓ **Anticipate** project **impact**

How to decline these criteria into different funding schemes?



GUIDE FOR APPLICANTS

Marie Skłodowska-Curie Actions

Individual Fellowships (IF)
Call identifier: H2020-MSCA-IF-2015
Closing Date: 10 September 2015 at 17:00:00
(Brussels local time)

Date of publication: 12 March 2015
Version Number: 2015.1

Note: National Contact Points **NCPs** have been set up across Europe by the national governments to provide information and personalised support to H2020 applicants in their native language. The mission of the NCPs is to raise awareness, inform and advise on H2020 funding opportunities as well as to support potential applicants in the *preparation, submission and follow-up* of the grant applications. For details on the NCP in your country please consult the website at http://ec.europa.eu/research/participants/portal/desktop/en/support/national_contact_points.html

Three examples of successful proposals:

TREASURE H2020 ITN MSCA
IRIS ESA Alcantara
DemoGRAPE PNRA

Your idea **must fit** the call

H2020 ITN MSCA

***Bottom Up**: Any idea is welcome*

PNRA

TREASURE

Training REsearch and Applications network to Support the Ultimate Real time high accuracy EGNSS solution

DemoGrape

Demonstrator for GRAPE (GNSS Research and Application for Polar Environment)

ESA Alcantara

***Top Down**: Your idea must address a required solution*

IRIS

Ionospheric Research for Biomass in South America

YOUR IDEA SHOULD MEET A NEED FILLING A GAP

TREASURE

- Existing **gap of specialists** in the emerging area of **European GNSS**
- Need to form a **new generation of scientists** having scientific skills oriented to applications demanding high accuracy positioning and navigation
- Necessity to **promote**, communicate and disseminate the **EGNSS potentialities**

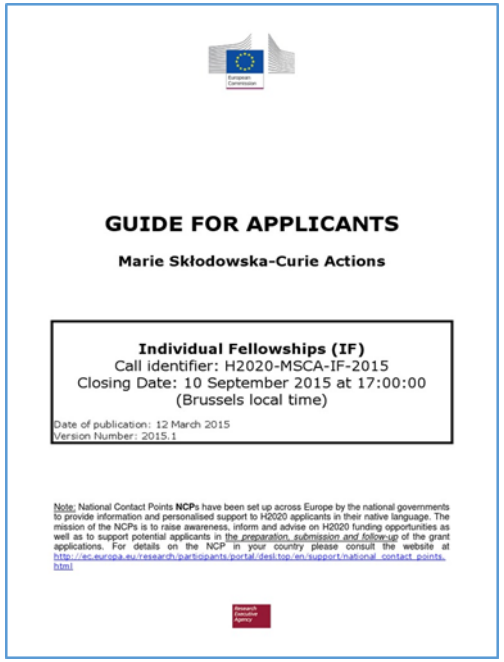
IRIS

- Existing **gap of knowledge** of the ionospheric impact on the P-band satellite observations of tropical forests in **Brazil**
- Need to **collaborate with Brazilian scientists** to learn about ionospheric **local** features
- Necessity to foresee **access to existing networks** or to **run new installations** to **assist** the **ESA satellite** operations

DemoGRAPE

- Existing **gap** of a service able to assist the GNSS users in the polar regions to provide high accuracy positioning
- **Need to facilitate** the data/algorithms **transmission from Antarctica** to feed the positioning services
- Necessity of **reliable** service to ensure the required **safety**

Be **compliant** with the Guide for Applicants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H2020 ITN MSCA

- **To train** a **new generation** of creative, entrepreneurial and innovative early-stage **researchers** able to face current and future challenges and to convert knowledge and ideas into products and services for economic and social benefit
- **Academic** and **non-academic** bodies - Minimum: **3 different countries** Member State or Associated Countries
- **Early-Stage Researchers** (ESRs) must, at the date of recruitment by the beneficiary, be **in the first four years** (full-time equivalent research experience) of their research careers and have **not been awarded a doctoral degree**.
- **Mobility rule**: researchers must not have resided or carried out their main activity (work, studies, etc.) in the country of the recruiting beneficiary for more than 12 months in the 3 years immediately before the recruitment date.

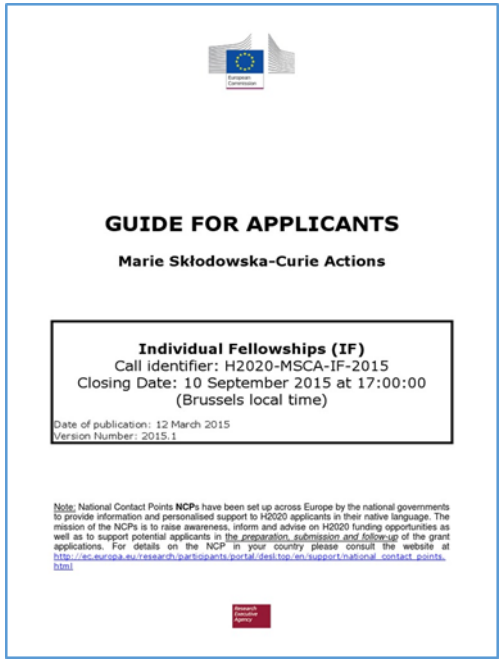
Proposals will be evaluated on the basis of the following **award criteria**:

Excellence

Impact

Quality and Efficiency of the Implementation

Be **compliant** with the Guide for Applicants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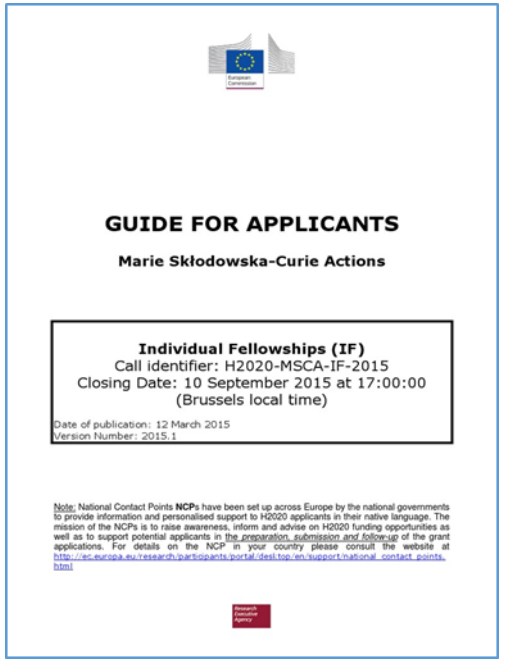
ESA Alcantara

- Perform **specific studies asked by ESA**
- Funding **only** to **ESA Member States**
- Mandatory to involve at least **one non-ESA Member State at no cost for ESA**
- Study teams must consist of at least **three principal researchers** per proposal, two at the European institution and a third one based in a non-ESA MS (external researcher).
- The Responsible must be a **senior research** fellow or professor
- Participation of a **junior researcher is mandatory** (post-graduate doctoral student or a research fellow with maximum up to five years' experience of post-doctoral research)
- The contribution of an **external researcher** affiliated to an academic entity based in the **geographical region identified by ESA**
- The participation of any **industrial entity** as subcontractor is allowed but costs should not exceed **20%** of total study price.
- Contractual **price below** 100 k€

Be **compliant** with the Guide for Applicants

PNRA (Italian National Program for Antarctic Research)

- **Propose any idea** within the scientific areas listed in the Call (Sun-Earth relationship and Space Weather is included)
- The proposed activity **must** be performed at **foreign (not Italian) Antarctic stations**
- The proposers **must** be affiliated to **academic entities** (Universities or Research bodies)
- The proposed **price must** be **> 100 k€ and < 500 k€**
- Any **foreign scientist** involved can be **officially part** of the project team but **cannot receive directly the funds**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Proposals will be evaluated on the basis of the following **award criteria**:

Quality of the proposal
Quality of the proposing team
Impact

Form a **good Consortium**

TREASURE

- Need to **mix academic and industrial partners** to train specialists having scientific skills oriented on applications
- **Maximize** the participation of **different European MS or AC** (mandatory at least three)
- Maximize the **involvement of recognised top experts** in the field

IRIS

- Need to have **on board a Brazilian partner**
- **Minimize** the **number** of partners to keep the **budget low** (below 100 k€)
- Involve a **Junior Researcher**
- **Avoid** or **minimize** the involvement of **industries** (costs limited to 20% of total price)

DemoGRAPE

- Need to rely on **foreign Antarctic stations**
- **Minimize** the participation of **foreigner** partners (not funds allowed)
- Necessity to **mix scientific** (ionosphere) and **technological** (data/algorithms transmission) expertise

Anticipate project **impact**

TREASURE

- Creation of a community of **13 young researchers** specialists on EGNSS high accuracy applications
- **Promotion, communication** and **dissemination** of the **EGNSS** potentialities

IRIS

- Assessment of the **ionospheric impact** on **ESA satellite mission** over Brazil
- **Best practices** for future infrastructures supporting the ionospheric impact mitigation

DemoGRAPE

- **Prototype of a service** to support the **GNSS high precision operations** over polar latitudes
- Use of **Cloud computing** technology in remote hostile environments (Antarctica)

Training REsearch and Applications Network to Support the Ultimate Real-Time High Accuracy EGNSS Solution

Submitted to the H2020 MSCA ITN 2016 Call: **one of the 109 awarded proposals out of 1611 ITN proposals**

SUCCESS RATE < 7%

Total cost: **3386593.80 €**

Motivation:

- To exploit Global Navigation Satellite Systems (GNSS) to establish the blueprint for the **most accurate real-time positioning service**
- **Train fellows** around the common goal of creating a conceptual **prototype** of this service and testing what commercial interest there is to **bring this future service to market**
- Create a sustainable **critical mass** to address the important role to be played by **Galileo** (EGNSS) in this context

Consortium

Beneficiaries

- University of Nottingham (UK) **Coordinator**
- University of Bath (UK)
- Politecnico di Torino (Italy)
- Delft University of Technology (NL)
- Istituto Nazionale di Geofisica e Vulcanologia (IT)
- Fugro Intersite BV (NL)
- Geo++ GmbH (DE)
- Noveltis (FR)
- Deimos Engenharia (PT)

Host TREASURE fellows

Associated partners

- Alezi Teodolini Equipamentos Topográficos e Comércio (BR)
- CNH Industrial (BE)
- Curtin University (AU)
- Gter srl Innovazione in Geomatica, GNSS e GIS (IT)
- **Leibniz Universität Hannover (DE)**
- Istituto Superiore Mario Boella (IT)
- **Instituto Superior Técnico (PT)**
- Jipyong Space Inc (KR)
- Royal Netherlands Meteorological Institute (NL)
- State Office for Geoinformation and Land Surveying Niedersachsen (DE)
- Oregon State University (US)
- Hong Kong Polytechnic University (HK)
- SpacEarth Technology srl (IT)
- Spirent Communications plc (UK)
- Centrum Badan Kosmicznych (PL)
- Septentrio Satellite Navigation NV (BE)
- **Toulouse Business School (FR)**
- Topcon Positioning Systems LLC (RU)
- University of New Brunswick (CA)
- Universidade Estadual Paulista (BR)
- **University of Salento (IT)**

Input to SB, provide secondments, **PhD**

Fellows

Juliana Damaceno
ESR1

Jon Bruno
ESR2

Karl Bolgrem
ESR3

Hongyang Ma
ESR4

Caner Savas
ESR5

Wenjian Qin
ESR6

Kai Guo
ESR7

Brian Weaver
ESR8

Dimitrios Psychas
ESR9

Francesco Darugna
ESR10

Hossein Ghobadi
ESR11

Paola Testa
ESR12

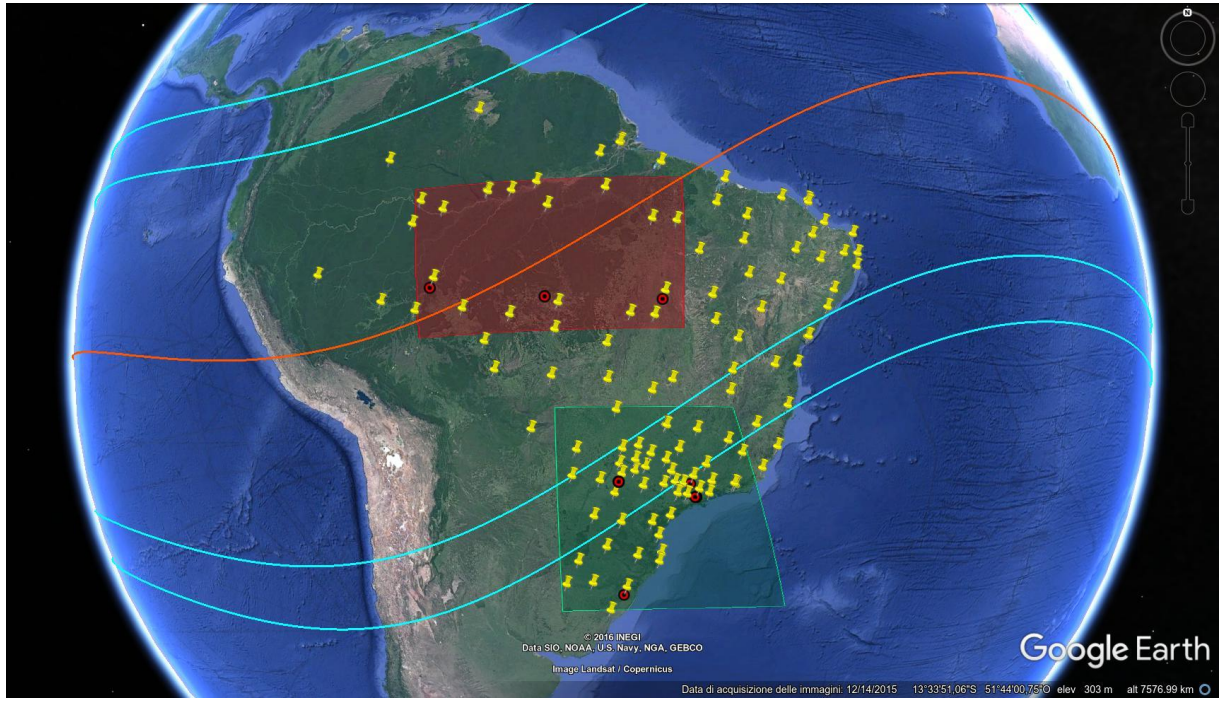
Lotfi Massarweh
ESR13

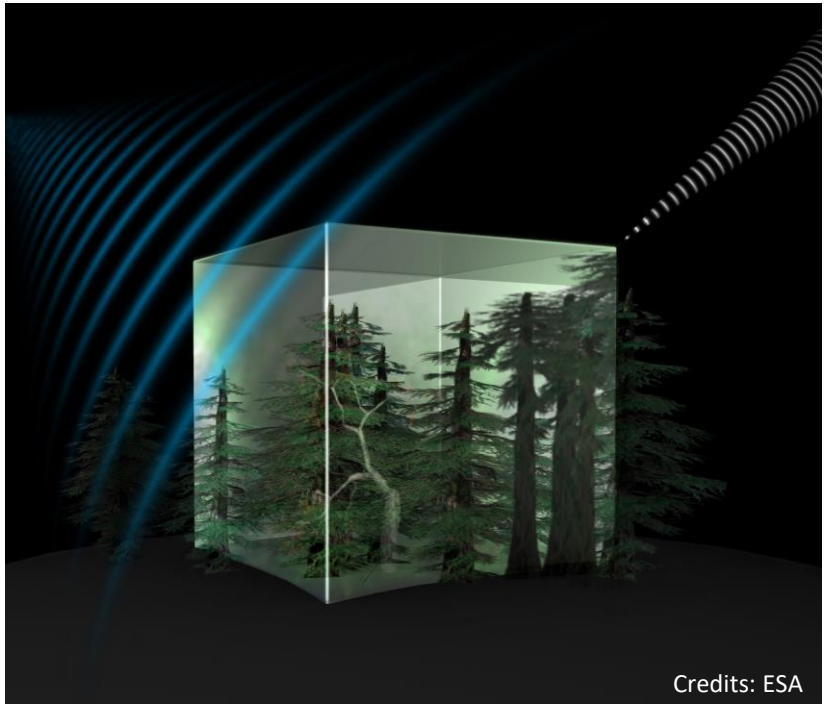
IRIS Ionospheric Research for Biomass in South America

Submitted to the ESA Call Characterisation of the ionospheric environment at low latitudes, application to Biomass external calibration sites

3 proposals were accepted
Total cost**: 99924,73 € + 11860,00 € Travel Costs**

Motivation:
Characterize the **ionospheric morphology** and dynamics over **Brazil** to assess the **ionospheric impact on BIOMASS**





IRIS

Consortium

Istituto Nazionale di Geofisica e Vulcanologia, Italy **Coordinator**

Istituto Superiore Mario Boella, Italy

SpacEarth Technology, Italy

University of Bath, UK

University of Nottingham, UK

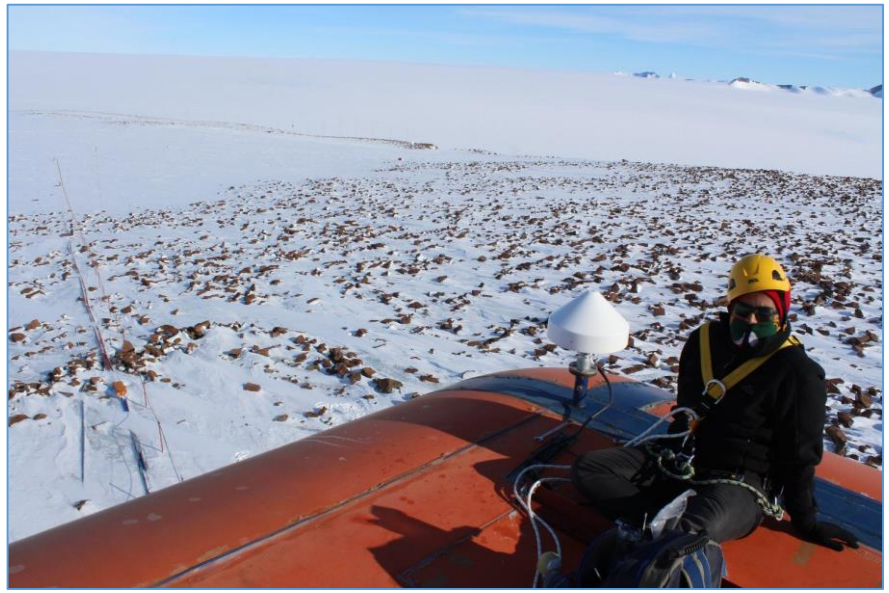
Universidade do Vale do Paraíba (UNIVAP), Brazil

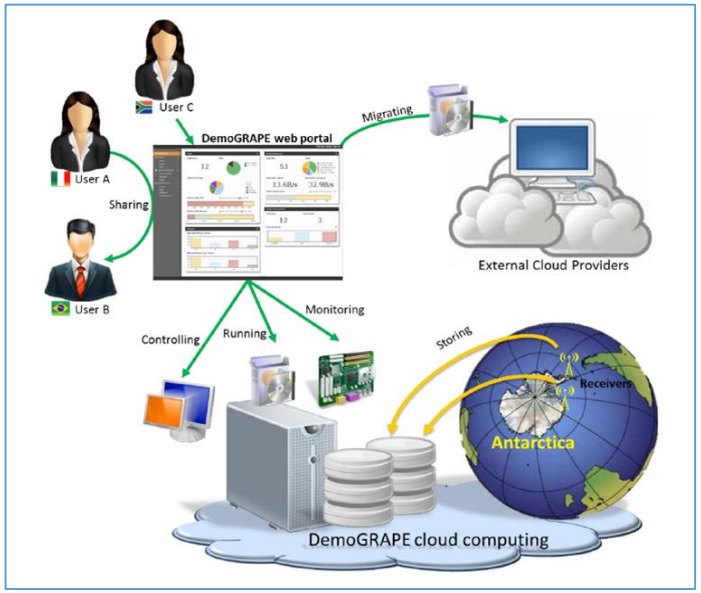
Demonstrator for **GRAPE**
(**G**NSS **R**esearch and **A**pplication for **P**olar **E**nvironment)

Submitted to PNRA Call C Research Projects at foreign stations or within international initiatives

Total cost: **148000 €**
11 Proposals accepted, nr. 2 in the evaluation ranking

Motivation
Improve quality of **GNSS position** solution in **polar** regions





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Politecnico di Torino, Italy

National Institute of Space Physics, Brazil

South Africa National Space Agency


KEEP
CALM
AND
GOOD
LUCK