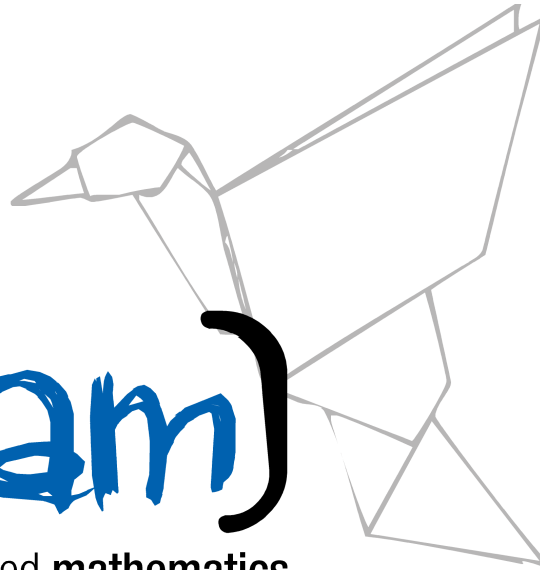


Jornada Informativa Acciones Marie Sklodowska-Curie en España: Convocatoria RISE 2015

Miguel A. Benítez,
Madrid, 27th February 2015



basque center for applied mathematics



EXCELENCIA
SEVERO
OCHOA



EUSKO JAURLARITZA
GOBIERNO VASCO

HEZKUNTZA, HIZKUNTZA POLITIKA
ETA KULTURA SAILA

DEPARTAMENTO DE EDUCACIÓN,
POLÍTICA LINGÜÍSTICA Y CULTURA

(bcam)

www.bcamath.org
basque center for applied mathematics



Agenda

1. Overview of BCAM
2. BCAM and the FP7 / H2020
3. H2020 – 644202 – GEAGAM
 1. Short description
 2. Work-Packages
 3. Partnerships: our experience
 4. Daily management of the project
4. Advantages of RISE projects



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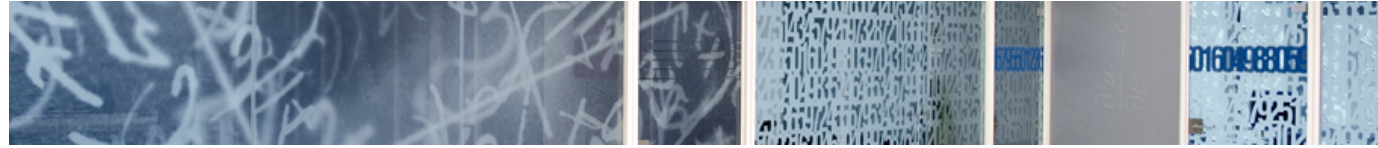


1. Basque Center for Applied Mathematics

- BCAM is a research center constituted as a non-profit association.
- Aligned with **the Basque Science & Technology Strategy** and collaborating with the University, Technology Centers, Corporations and the rest of the R&D&I agents.
- Founding members: **Ikerbasque**, the Government granted Basque Foundation for Science has been charged with the responsibility of creation new capabilities and infrastructures for fostering research.
- Based on a core of highly qualified researchers, and an extended international network of excellence, BCAM aims to become an **international center** of reference in the field of Applied Mathematics.
- BCAM has been recognized as a **Severo Ochoa** Research Center by the MINECO.



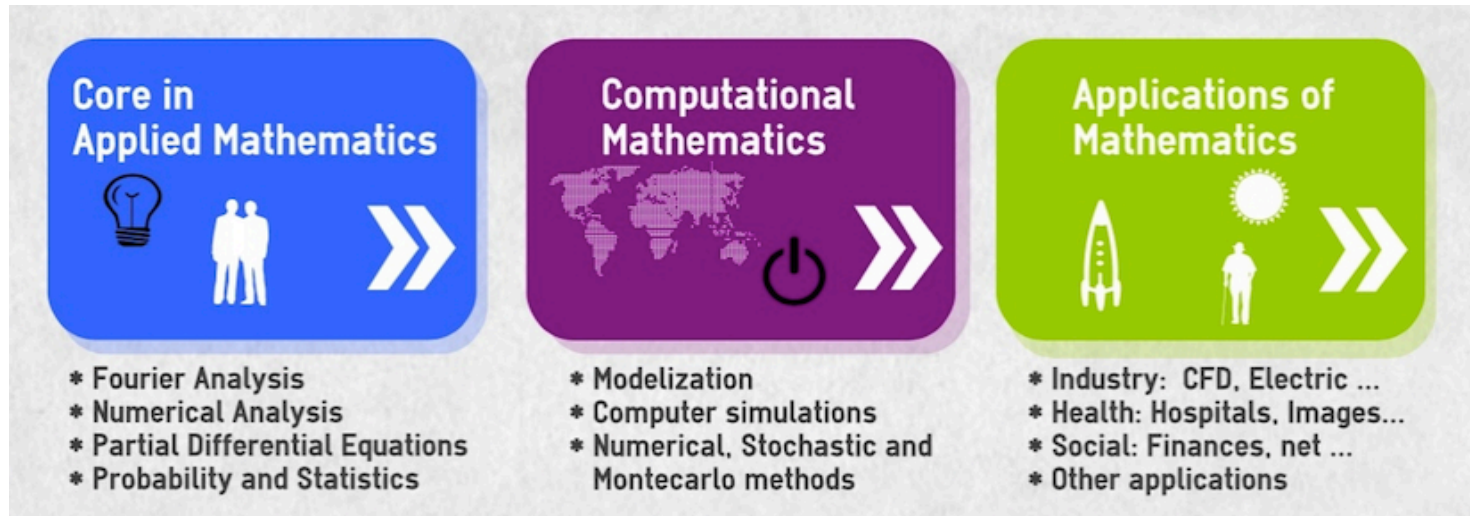
1. Mission



- ✓ Perform **research** in the **frontiers of mathematics**,
- ✓ **Train and attract** talented scientists,
- ✓ **Interact with industry and R&D&I agents**,
- ✓ **Disseminate mathematics and its applications within society**,
- ✓ Strengthen **the Basque science and technology system**,
- ✓ Become a relevant **node in the international mathematics research network**.



1. BCAM Scientific Platforms



- BCAM main research objectives are structured in the following **Scientific Platforms**:
 - **Core in Applied Mathematics:** PDE, Numerical Analysis, Fourier Analysis, Probability and Statistics.
 - **Modelling, Simulation and Computational Mathematics:** with deterministic and stochastic methods and software targeting High-Performance Computing (HPC) architectures.
 - **Applications** to Industry, Social Sciences and Health Sciences.

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2. European Union Research projects in BCAM

2015

[H2020]

○ **660021 DEDMEE**, From 01-06-2015 To: 31-05-2017 (2-years)

- PI: S. BRETEAUX, CALL: H2020-MSCA-IF-EF-2014. BUDGET **158,121.60 €**
- Consortium: BCAM (ES),

○ **644202 GEAGAM**, From 01-02-2015 To: 31-12-2017 (3-years)

- PI: D. PARDO, CALL: H2020-MSCA-RISE-2014. BUDGET: **580,500.00 €**
- Consortium: UPV/EHU, BCAM, BSC-CNS (ES), INRIA, TOTAL, SA (FR), PUCDV, UTFSM, UC (CHILE), KAUST-U (SA), U-TEXAS (USA)

[FP7]

○ **295217 HPC-GA**, From 01-01-2012 To: 31-12-2014 (2-years)

- PI: JF. MEHAUT, CALL: IRSES 2011. BUDGET: **243,600.00 €**
- Consortium: INRIA (FR), BCAM (ES), UFDRGS (BR), UNAM (MEXICO)

○ **246775 NUMERIWAVES**, From 01-02-2010 To: 31-01-2016 (5-years + 1-year)

- PI: E. ZUAZUA, CALL: Advanced Grants 2009. BUDGET: **1,663,000.00 €**
- Consortium: BCAM

2009

2. MSCA – Research and Innovation Staff Exchange

- **Main objective:**
 - To promote international and inter-sector collaboration through research and innovation staff exchanges.
- **General aspects:**
 - Development of a joint research and innovation project.
 - Exchanges of staff already recruited from 1 to 12 months.
 - Minimum consortium of three entities from at least 2 different EU/AC countries.
- **Funding:** The limit is 540PM
 - Staff member unit cost → 2000
 - Institutional unit cost → 1800 for research, training and networking costs + 700 for management and indirect costs
- **Next deadline:** 28/04/2015 (budget: €80 million)



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3.1. 644202 – GEAGAM

- **Principal Investigator:** DAVID PARDO, BCAM UPV-EHU Researcher, Ikerbasque Research Professor
- **TITLE:** Geophysical Exploration using Advanced GALerkin Methods (GEAGAM)
- **Panel:** ENG - Information Science and Engineering (ENG)
- **Beneficiaries:** University of the Basque Country (UPV/EHU), Basque Center for Applied Mathematics (BCAM), Barcelona Supercomputing Center (BSC), Institut National de Recherche en Informatique et en Automatique (INRIA), TOTAL S.A.
- **Third countries:** Politécnica Universidad Católica de Valparaíso (PUCV), Universidad de Chile (UCHILE), Universidad Técnica Federico Santa Maria (USM), The University of Texas at Austin (UT), King Abudullah University of Sciences and Technology (KAUST)



3.1. 644202 – GEAGAM

Abstract:

*The main objective of this Marie Curie RISE action is **to improve and exchange interdisciplinary knowledge on applied mathematics, high performance computing, and geophysics to be able to better simulate and understand the materials composing the Earth's subsurface.** [...] Results will be widely disseminated through publications, workshops, post-graduate courses to train new researchers, a dedicated webpage, and visits to companies working in the area. In that way, **we will perform an important role in technology transfer between the most advanced numerical methods and mathematics of the moment and the area of applied geophysics.***



3.2. 644202 – GEAGAM

- **Work Package 0:** Management: Scientific and Administrative Management of the GEAGAM exchange program.
- **Work Package 1:** High-order Galerkin Methods for Electromagnetic Exploration.
- **Work Package 2:** Stabilized High-order Galerkin Methods for Seismic Exploration.
- **Work Package 3:** Large Parallel Simulations of Geophysical Measurements.
- **Work Package 4:** Inversion Methods using Model Reduction and Dimensionally
- **Work Package 5:** Industrial Applications and Transfer of Knowledge.

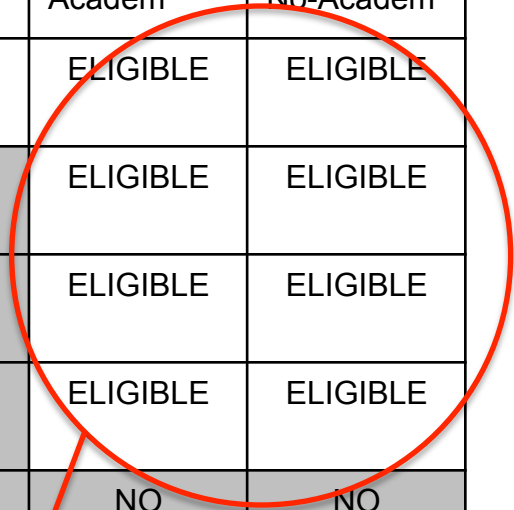
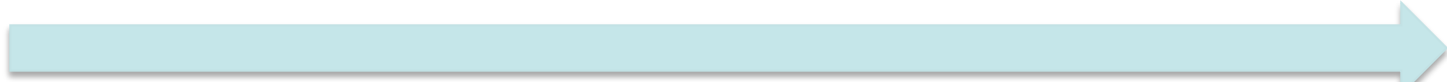


3.2. 644202 – GEAGAM

TO

	C_1 (MA) Academ	C_1 (MA) No-Academ	C_2 (MA) Academ	C_2 (MA) No-Academ	C_3 (TC*) Academ	C_3 (TC*) No-Academ
C_1 (MA) Academ	NO	NO	NO	ELIGIBLE	ELIGIBLE	ELIGIBLE
C_1 (MA) No-Academ	NO	NO	ELIGIBLE	NO	ELIGIBLE	ELIGIBLE
C_2 (MA) Academ	NO	ELIGIBLE	NO	NO	ELIGIBLE	ELIGIBLE
C_2 (MA) No-Academ	ELIGIBLE	NO	NO	NO	ELIGIBLE	ELIGIBLE
C_3 (TC*) Academ	NO	NO	NO	NO	NO	NO
C_3 (TC*) No-Academ	NO	NO	NO	NO	NO	NO

FROM



Ethical Issues



3.3 Our experience: Partnerships



- ✓ Most of them are scientific colleagues with our PI and they are **experienced researchers** in complementary topics and areas.
- ✓ It is **easy talk about the scientific aspects** of the project,
- ✓ We had the **consortium agreement** template of H2020, very useful.
- ✓ **No bureaucracy** problems with regard to the EU application,



- ✓ Looking for partners → **the pyramidal business**: It is very difficult to find out the first 2 partners, but is more difficult to stop the process, your new partners have their partners....
- ✓ ...but we had some difficulties in the **secondments definition**.
- ✓ Difficulties in the **adaptation from FP7 to H2020** in order to look for eligible TCs. For instance Brazil was eligible in FP7, no in H2020.
- ✓ **but technical problems during the Grant Agreement preparation** phase in the portal.

3.4 Daily management of the project

- The project started on Jan 1st 2015 and we had the kick-off meeting (by SKYPE) on Jan 29th .
- We planned to distribute some part of the budget for Workshops and common activities.
- Problems with proactivity with some partners
- Some questions about the daily of the project:
 - Visa issues (Third countries)
 - Expenses table: payment? income tax? Double taxation agreement?
 - Insurance?
 - “networking costs”?

Marie Skłodowska-Curie Action	Staff member unit cost [per person-month of secondment]	Institutional unit cost [per person-month of secondment]	
		Research, training and networking costs	Management and indirect costs
Research and Innovation Staff Exchange	2000	1800	700



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4. Advantages of the RISE projects

- ✓ **Promoting the international and inter-sector collaboration** through research and innovation staff exchanges
- ✓ **Formalization of the international network** of our researchers and teams.
- ✓ **Strengthen the interaction** between organisations in the **academic and non-academic** sectors, and between Europe and third countries
- ✓ **Connection with companies** and in particular, with industry (transfer knowledge).
- ✓ **Funding opportunity** to cover the exchanges (both ways)



Eskerrik asko

Gracias

Thank you

R I **S** E
F **U** N D I N G
A C A D E M I **C**
N O N - A **C** A D E M I C
N **E** T W O R K
I N T E R - **S** E C T O R
T R A N **S** F E R

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