



ATLANTIC
INTERACTIONS

INTEGRATING SPACE, CLIMATE, OCEAN AND DATA SCIENCES
THROUGH NORTH-SOUTH/SOUTH-NORTH COOPERATION

TOWARDS AN ATLANTIC INTERNATIONAL RESEARCH CENTER | AIR CENTER
TERCEIRA, AZORES, 20 - 21 APRIL 2017

ATLANTIC INTERACTIONS

*Integrating Space, Climate, Oceans and Data Sciences
through North-South / South-North Cooperation*

High-level Industry-Science-Government Dialogue

Towards the Atlantic International Research Center (AIR Center)

Terceira, Azores, 20-21 April 2017

Program



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High-level Industry-Science-Government Dialogue

Towards the Atlantic International Research Center (AIR Center)

Terceira, Azores, 20-21 April 2017

Overall Program

Thursday, April 20, 2017

14:30-16:00: **Welcome remarks: Setting the stage**

16:30-18:15: ***Atlantic Interactions*: Informal workshops on future research agendas (4 parallel sessions)**

- Workshop 1: Space – Satellites, new space and launchers
- Workshop 2: Ocean, climate and atmospheric research
- Workshop 3: Data Management and sustainable energy systems
- Workshop 4: Scientific culture and education for all: space education and ocean literacy

18:20-18:30: **Closing address** and Cocktail, at Reception Hall

Johann-Dietrich Wörner, Director General, European Space Agency

20:00: **Azores Gala Dinner**, Terceira Golf Club (Dress code: Business Casual)

Key note speaker: **Dale Klein**, Associate Vice-Chancellor for Research – The University of Texas System



Friday, April 21, 2017

9:15-12:30: **High level Industry-Science-Government Dialogue** (Plenary Session)

- Ministerial Roundtable and Industry-Science-Government Dialogue

12:45-14:30: **Lunch**

14:30-16:00: **High level Industry-Science-Government Dialogue** (Plenary Session)

- Ministerial Roundtable and Industry-Science-Government Dialogue
- Closing Ministerial Roundtable and Dialogue

16:30-18:30: ***Atlantic Interactions: Technical Session on future steps*** (Plenary Session)

- Presentation by rapporteurs of Workshops:
 - Space – Satellites, new space and launchers
 - Ocean, climate and atmospheric research
 - Data management and sustainable energy systems
 - Scientific culture and education for all: space education and ocean literacy

18:30-19:00: **Closing Debate** (Plenary Session)

19:00: **Conference Closure**



DETAILED PRELIMINARY PROGRAM

Thursday, April 20, 2017

14:00-14:30: **Registration and Welcome**

14:30-16:00: ***Atlantic Interactions: Welcome Remarks - Setting the stage***

- Welcome Remarks:
 - **Manuel Heitor**, Minister of Science, Technology and Higher Education, Portugal
 - **Gui Menezes**, Azores Regional Secretary for Sea, Science and Technology, Portugal
 - **António Vicente**, Head of Cabinet of the European Commissioner for Research, Science and Innovation, European Commission
 - **Slawomir Tokarski**, Director of Innovation and Advanced Manufacturing, DG GROW, European Commission
- Brief initial interventions (3 min each):
 - **Johann-Dietrich Wörner**, Director- General, European Space Agency.
“A space based research agenda for the Atlantic”
 - **Kumar Sivan**, Director of the Vikram Sarabhai Space Centre, Indian Space Research Organisation, India
 - **Ulisses Mello**, President, IBM Research Brazil, Brazil.
“Data management to enable multidisciplinary research in the Atlantic”
 - **Stewart Bernard**, Researcher, Council for Scientific and Industrial Research, South Africa
 - **Dava Newman**, Professor, Massachusetts Institute of Technology, United States of America.
“Formulation of an Earth Operating Platform including oceans, land, air and space”
 - **Yingjie Yu**, Director, Shanghai Engineering Centre for Microsatellites, Chinese Academy of Sciences
 - **Judite Nascimento**, Rector, University of Cape Verde, Cape Verde.
 - **Pedro Silva Dias**, Office of the Rector, University of São Paulo, Brazil.
“The relevance of an transatlantic research cooperation”
 - **Juan Sanchez**, Interim Vice President for Research, University of Texas Rio Grande Valley, United States of America.
 - **Ricardo Serrão Santos**, Member, European Parliament.
“The Atlantic as a North-South, South-North platform for research in Oceans, Climate and Atmosphere”
 - **Paulo Ferrão**, Foundation for Science and Technology, Portugal.
“Atlantic interactions towards the AIR Center”



16:00-16:30: Coffee Break

16:30-18:15: **Workshops - Parallel Sessions**, as described in the following pages

18:20-18:30: **Closing address and Cocktail, Reception Hall; Johann-Dietrich Wörner**, Director General, European Space Agency

20:00: **Azores Gala Dinner**, Terceira Golf Club; Key note speaker: **Dale Klein**, The University of Texas System



4 Workshops - Parallel Sessions (16:30-18:30) – detailed program

16:30-18:15: **Workshop 1: Space – Satellites, New Space Industries and Launchers**

Chair: **Luís Santos**, Government of the Azores, Portugal

Rapporteurs: **Miguel Bélo Mora**, Elecnor Deimos, Spain
Slawomir Tokarski, DG GROW, European Commission

Brief Initial Presentations (3 min each):

- **Ricardo Galvão**, National Institute for Space Policies, INPE, Brazil
- **Alain Bories**, OHB, Germany
- **S. Rakesh**, Chairman, Antrix Corporation, India
- **Hélène Huby**, Head of New Space Ventures, Airbus Safran Launchers
- **Michael Lauster**, Fraunhofer Institute for Technological Trend Analysis INT, Germany
- **Marius-Eugen Opran**, Romanian Space Agency, Romania
- **Piero Messina**, European Space Agency
- **Claire Barcham**, Satellite Launch Programme UK Space Agency, United Kingdom
- **Nuno Ávila**, Deimos, Portugal
- **S. K. Kanungo**, Director, Launch Vehicle Programme Office, Indian Space Research Organisation, India
- **João Costa Pinto**, President, PROESPAÇO, Portugal
- **Ricardo Mendes**, TEKEVER, Portugal
- **Yingjie Yu**, Shanghai Engineering Centre for Microsatellites, Chinese Academy of Sciences, China
- **Amal Khatri**, South Africa National Space Agency, South Africa
- **Ricardo Conde**, Edisoft, Portugal

Debate: All workshops participants





16:30-18:15: **Workshop 2: Ocean, climate and atmospheric research**

Chair: **Jerry Miller**, The National Academy of Sciences, United States of America

Rapporteurs: **Marco Weydert**, DG Research and Innovation, European Commission
Pål Sørgaard, Ministry of Education and Research, Norway

Brief Initial Presentations (3 min each):

- **John Evans**, Marine Institute, Ireland
- **Jailson Bittencourt**, Secretary for Policies and Programs, Ministry of Science, Technology, Innovation and Communications, Brazil
- **Arthur B. Baggeroer**, Massachusetts Institute of Technology, United States of America
- **Cristina Pedicchio**, President, National Institute for Oceanography and Geophysics - OGS, Italy
- **Telmo Morato**, University of Azores, Portugal
- **Ned Dwyer**, EurOcean
- **Patrick Heimbach**, University of Texas at Austin, United States of America
- **Magda Chambriard**, former President of the Brazilian National Petrol Agency, Brazil
- **Prasanna Kumar**, National Institute of Oceanography, India
- **Rui Caldeira**, Madeira Oceanic Observatory, Portugal
- **Steward Bernard**, Council for Scientific and Industrial Research, South Africa

Debate: All workshop participants



16:30-18:15: **Workshop 3: Data Management and sustainable energy systems**

Chair: **António Raposo de Lima**, IBM-Portugal, Portugal

Rapporteur : **João Luís Gaspar**, University of Azores, Portugal

Brief Initial Presentations (3 min each):

- **Dan Stanzione**, University of Texas at Austin, United States of America
- **António Cunha**, Council of Rectors of the Portuguese Universities, Portugal
- **José Fonseca de Moura**, Carnegie Mellon University, United States of America
- **Tony Lewis**, Centre for Marine and Renewable Energy, University of Cork, Ireland
- **Nuno Catarino**, Elecnor Deimos, Portugal
- **João Afonso**, Portuguese Energy Network Company (REN), Portugal
- **Alberto de Pedro**, GMV, Spain and Portugal
- **Raquel Harper**, CONNECT Center, Ireland
- **Juan Sanchez**, , Interim Vice President for Research, University of Texas Rio Grande Valley, United States of America

Debate: All workshop participants



16:30-18:15: **Workshop 4: Scientific culture and education for all: space education and ocean literacy**

Chair: Rosalia Vargas, Ciência Viva, Portugal

Rapporteur : Ana Noronha, Ciência Viva, Portugal

Key-note address:

- **Teresa Lago**, Centre for de Astrophysics at the University of Porto and International Astronomical Union Assistant General Secretary, Portugal

Brief Initial Presentations (3 min each):

- **Otília Reis**, Fullbright Commission
- **José Joaquin Hernández Brito**, Oceanic Platform of the Canary Islands - PLOCAN, Spain
- **Maria José Costa**, Marine and Environmental Sciences Centre - Lisboa, Portugal
- **Sharon L. Strover**, University of Texas at Austin, United States of America
- **António Alberto Alcochete**, National Director of Evaluation and Accreditation of Science and Technology, Angola
- **Ana Martins**, University of Azores, Portugal
- **Cátia Cardoso**, Ciência Viva, Portugal
- **Ana Colaço**, Marine and Environmental Sciences Centre - Azores, Portugal
- **Isabel Sousa Pinto**, Interdisciplinary Centre of Marine and Environmental Research, Portugal
- **Bernardo Mata**, Portuguese Task Group for the Extension of the Continental Shelf, Portugal
- **Teresa Silva**, Astronomic Observatory of Santana, Azores, Portugal
- **João Paulo Constância**, Expolab – Centro Ciência Viva, Azores, Portugal

Debate: All workshop participants



Friday, April 21, 2017

Atlantic Interactions High level Industry-Science-Government Dialogue

9:15-11:15: **Ministerial Roundtable and Industry-Science-Government Dialogue: part 1**

Chair: **Manuel Heitor**, Minister for Science, Technology and Higher Education, Portugal

- Welcome remarks:
 - **Augusto Santos Silva**, Minister of Foreign Affairs, Portugal
 - **Vasco Cordeiro**, President, Regional Government of Azores, Portugal

- Brief introductory presentations (3 min each):
 - **Dava Newman**, Apollo Professor of Astronautics, Massachusetts Institute of Technology. Former NASA Deputy-Administrator, United States of America
 - **Jailson Bittencourt**, Secretary for Policies and Programs, Ministry of Science, Technology, Innovation and Communications, Brazil
 - **Juergen Ackermann**, General Secretary, Airbus Safran Launchers, France
 - **S. Rakesh**, Chairman, Antrix Corporation, India
 - **Stewart Bernard**, Council for Scientific and Industrial Research, South Africa

- Ministerial Roundtable and Dialogue: informal discussion around the table (interventions of up to 3 min each)

- Closing Summary of Part 1
 - **Naledi Pandor**, Minister for Science and Technology, South Africa

11:15–11:35: **Group Photo and Coffee Break**



11:35-12:45: **Ministerial Roundtable and Industry-Science-Government Dialogue: part 2**

Chair: **Juan María Vázquez Rojas**, General Secretary of Science and Innovation, Spain

- Brief introductory presentations (5 min each):
 - **Jean-Yves Le Gall**, President, Centre National d'Études Spatiales (CNES), France
 - **Steven Leslie**, Executive Vice Chancellor for Academic Affairs, The University of Texas System, Unites States of America
 - **Yingjie Yu**, Director, Shanghai Engineering Centre for Microsatellites, Chinese Academy of Sciences
 - **Amal Khatri**, Executive Director of the Space Programme, South Africa National Space Agency, South Africa
 - **José Fonseca de Moura**, Professor, Carnegie Mellon University, United States of America
- Ministerial Roundtable and Dialogue: informal discussion around the table (interventions of up to 3 min each)
- Closing Summary of Part 2
 - **Y. S. Chowdary**, Minister of State for Science, Technology and Earth Sciences, India

12:45-14:30: **Lunch**

14:30-16:00: **Ministerial Roundtable and Industry-Science-Government Dialogue: Part 3**

Chair: **Ogbonnaya Onu**, Minister of Science and Technology, Nigeria

- Brief introductory presentations (5 min each):
 - **Kumar Sivan**, Director, Vikram Sarabhai Space Centre, Indian Space Research Organisation, India
 - **Cristina Pedicchio**, President, National Institute for Oceanography and Geophysics, Italy
 - **António Pascoal**, Professor, Instituto Superior Técnico, University of Lisbon, Portugal
 - **Renato Krpoun**, Head, Swiss Space Office, Switzerland
- Ministerial Roundtable and Dialogue: informal discussion around the table (interventions of up to 3 min each)



- Closing Summary of Part 3 (3 min each)
 - **Maritza Rosabal Peña**, Minister for Education, Family and Social Affairs, Cape Verde
 - **Otília Reis**, Executive Director, Fulbright Commission
 - **Slawomir Tokarski**, Director of Innovation and Advanced Manufacturing, DG GROW, European Commission

- Closing Ministerial Roundtable (interventions of up to 3 min each)
 - **Ivan Dimov**, Deputy Minister of Education and Science, Bulgaria
 - **Mary Teuw Niane**, Minister of Higher Education and Research, Senegal
 - **Maria Julia Muñoz**, Minister for Education and Culture, Uruguay
 - **Olinto Daio**, Minister for Education, Culture, Science and Communication, Sao Tome and Principe
 - **José Carvalho da Rocha**, Minister of Telecommunications and Information Technologies, Angola
 - **António Vicente**, Head of Cabinet of the European Commissioner for Research, Science and Innovation, European Commission
 - **Manuel Heitor**, Minister of Science, Technology and Higher Education, Portugal

16:00-16:30: Coffee Break

16:30-18:45: **Atlantic Interactions: Towards a research agenda for the Atlantic - future steps**
Presentations by workshops chairs and rapporteurs

Chair: **Manuel Heitor**, Minister for Science, Technology and Higher Education, Portugal

Theme 1: Space – Satellites, New space industries and launchers (3 min each):

- ◆ **Luís Santos**, Government of the Azores, Portugal
- ◆ **Miguel Bélló Mora**, Elecnor Deimos, Spain
- ◆ **Slawomir Tokarski**, DG GROW, European Commission

Theme 2: Ocean, climate and atmospheric research (3 min each):

- ◆ **Jerry Miller**, The National Academy of Sciences, United States of America
- ◆ **Pål Sørgaard**, Ministry of Education and Research, Norway
- ◆ **Marco Weydert**, DG R&I, European Commission

Theme 3: Data Management and Sustainable Energy Systems (3 min each):



- ◆ **António Raposo de Lima**, IBM-Portugal, Portugal
- ◆ **João Luís Gaspar**, University of Azores, Portugal

Theme 4: Scientific culture and education for all: space education and ocean literacy (3 min each)

- ◆ **Rosalía Vargas**, Ciência Viva, Portugal
 - ◆ **Ana Noronha**, Ciência Viva, Portugal
- Ministerial Roundtable and Dialogue: informal discussion around the table
(Interventions of up to 3 min each)
 - Approval of Conclusions

18:45: **Conference Closure**

Paulo Ferrão, President, Portuguese Foundation for Science and Technology, Portugal

Manuel Heitor, Minister for Science, Technology and Higher Education, Portugal