

Lindau 1970



**Bath 2013** 



Barcelona 2010



Boston 2007



Trieste 2004



Graz 1972



**Beacon Satellite** SYMPOSIUM 2016



Boston 2001



Moscow 1974



Miramare Castle, Trieste, Italy



The Abdus Salam International Centre for Theoretical Physics



Sopron 1997



Aberystwyth 1994



Boston 1976

Firenze 1978



Warsaw 1980



New Delhi 1983



Oulu 1986



Beijing 1988



Tucuman 1990



Boston 1992





### **Dedicated in Memory of**

## Dr. P.V.S. Rama Rao 1940-2014

Physics Professor, Registrar, Andhra University, Visakhapatanam, India Well know expert in low-latitude ionospheric physics

Professor/mentor of many students Author/Coauthor > 141 papers

Long term member of URSI
Co-chair: Beacon Satellite Studies Group,
Comm G

And a dear friend to all of us.



#### **Unprecedented Attendance!**

#### 199 Attendees from 48 Countries

Algeria, Argentina, Austria, Azerbaijan, Belgium, Brazil, Canada, Peoples Republic of China, Cameroon, Croatia, Cuba, Egypt, Ethiopia, Finland, France, Germany, Ghana, Hungary, India, Indonesia, Islamic Republic of Iran, Italy, Cote d'Ivoire, Japan, Kenya Malaysia, Nepal, Nigeria, Norway, Pakistan, Peru, Philippines, Poland, Palestine, Republic of Korea, Russian Federation, Rwanda, South Africa, Spain, Sri Lanka, Thailand, Turkey, Uganda, United Kingdom, Ukraine, United Republic of Tanzania, United States of America

Thanks to generosity of our sponsors, approximately 70 participants from developing countries received some level of scholarship to defray the cost of their participation.

#### **Paper Acceptance was Competitive**

Over 248 abstracts submitted. Accepted 118 Oral Presentations and 65 Posters.

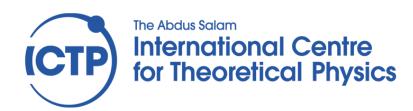


#### **Local Organizing Committee**

We thank the Abdus Salam International Centre for Theoretical Physics for their gracious and generous support as hosts of this symposium.

We specifically thank the Local Organizing Committee for their tireless efforts:

Sandro Radicella Bruno Nava Yenca Migoya Orue Stanka Tanaskovic Pandora Malchose





#### **Scientific Organizing Committee**

One of the reasons for the success of this meeting was the design and organization of session topics by this international group of radio scientists.

Patricia Doherty, Boston College, USA

Bruno Nava, ICTP, Italy

Andrzej Krankowski, University of Warmia and Mazury, Olsztyn, Poland

Sandro Radicella, ICTP, Italy

Matthew Angling, University of Birmingham, UK

Francisco Azpilicueta, National University of La Plata, Argentina

Anthea Coster, MIT Haystack Observatory, USA

Giorgiana De Franceschi, INGV, Italy

Keith Groves, Boston College, USA

Norbert Jakowski, German Aerospace Center, Germany

Cathryn Mitchell, University of Bath, UK

Babatunde Rabiu. National Space Research and Development Agency, Nigeria



#### **Session Chairs**

Inspiring leaders in their field made grand efforts for successful sessions.

Matthew Angling, United Kingdom

Angela Aragon-Angel, Spain

Bertram Arbesser-Rastburg, Austria

Francisco Azpilicueta, Argentina

Yannick Beniguel, France

Dieter Bilitza, USA

Anthea Coster, USA

Giorgiana De Franceschi, Italy

Eurico de Paula, Brazil

Patricia Doherty, USA

Tim Fuller-Rowell, USA

Keith Groves, USA

Norbert Jakowski, Germany

Attila Komjathy, USA

Andrzej Krankowski, Poland

Tiger Liu, Taiwan

Cathryn Mithcell, United Kingdom

Bruno Nava, Italy

Sergey Pulinets, Russian Federation

Babatunde Rabiu Nigeria

Sandro Radicella, Italy

Chuck Rino, USA

Endawoke Yizengaw, USA



# Beacon Satellite Studies Group URSI Commission G

Founded in 1972 and led for many years by:

Chair: Dr. Reinhart Leitinger, Austria

Mr. Jack Klobuchar, USA

Dr. P.V.S. Rama Rao, India

Mr. Jack Klobuchar retired

Dr. Leitinger suffered a stroke in 2006

Dr. P.V.S. Rama Rao, India passed away in 2014

Current Leadership:

Chair: Patricia Doherty, USA

Mr. Bruno Nava, Italy

Dr. Andrzej Krankowski, Poland









# Thanks to all of you for your interest and participation in the 19<sup>th</sup> International Beacon Satellite Symposium 2016!







INTERNATIONAL BEACON SATELLITE SYMPOSIUM - PROGRAM AT A GLANCE								
Sunday - 26 June	Monday - 27 June	Tuesday - 28 June		Wednesday - 29 June		Thursday 30 June		Friday - 1 July
	Budinich	Budinich Lecture	Euler	Budinich	Euler	Budinich	Euler	Budinich
	Lecture Hall	Hall	Lecture Hall	Lecture Hall	Lecture Hall	Lecture Hall	Lecture Hall	Lecture Hall
	Registration at the Leonardo Building Entrance (8:00 to 10:00)	Session 2: Irregularities and Scintillation Measurements and Effects (8:30 - 10:30)		Session 4A: Polar (high-latitude) Effects on GNSS (8:30 - 10:30)	Session 4B: Data Assimilation Modeling (8:30 - 10:30)	Session 5A: Advances in Ionosphere- Thermosphere Modeling and the Challenge of Validation (8:30-10:30)	Session 5B: Radio Occultation Techniques and Measurements (8:30-10:30)	Session 6: Ionospheric Effects on Satellite Based Navigation (08:30-09:30)  Session 7: Space Weather Effects (9:30-10:30)
		Coffee Break	1	Coffee Break	Coffee Break	Coffee Break	Coffee Break	Coffee Break
	Opening Ceremony (10:00 to 12:20)	Session 2: Irregularities and Scintillation Measurements and Effects (10:50 - 12:30)		Session 4A: Polar (high-latitude) Effects on GNSS (10:50 - 12:50)	Session 4B: Data Assimilation Modeling (10:50 - 12:50)	Session 5A: Advances in Ionosphere- Thermosphere Modeling and the Challenge of Validation (10:50-12:50)	Session 5B: Radio Occultation Techniques and Measurements (10:50-12:50)	Session 7: Space Weather Effects (10:50-12:50)
	Lunch Break	Lunch	Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break	Lunch Break
Registration will begin at the Adriatico Guest House 18:30-20:00	Session 1: Space and Ground Based TEC and Measurements (13:30 - 15:40)	Session 3A: Monitoring Natural Hazards (13:40 - 15:40)	Session 3B: Theory and Modeling of Ionospheric Scintillation and Irregularities (13:40 - 15:40)			Session 6: Ionospheric Effects on Satellite Based Navigation Systems (14:00-15:40)		Session 7: Space Weather Effects (14:00-15:00)
	Coffee Break	Coffee Break	Coffee Break			Coffee Break	İ	Coffee Break
Welcome Reception on the Adriatico Guest House Patio 19:00-20:30	Session 1: Space and Ground Based TEC and Measurements (16:00 - 18:00)	Session 3A: Monitoring Natural Hazards (16:00 - 17:20)	Session 3B: Theory and Modeling of Ionospheric Scintillation and Irregularities (16:00 - 17:20)	Excursion to Aquileia Friuli-Venezia Giulia UNESCO World Heritage Site (Depart at 14:00)		Session 6: Ionospheric Effects on Satellite Based Navigation Systems (16:00-17:20)		Beacon Satellite Studies Group Meeting, Awards Ceremony and
		Poster Session and Reception (17:30 - 19:30)				Banquet at Ristorante Le Terrazze at Hotel Riviera 19:00		Close (15:20 - 16:00)