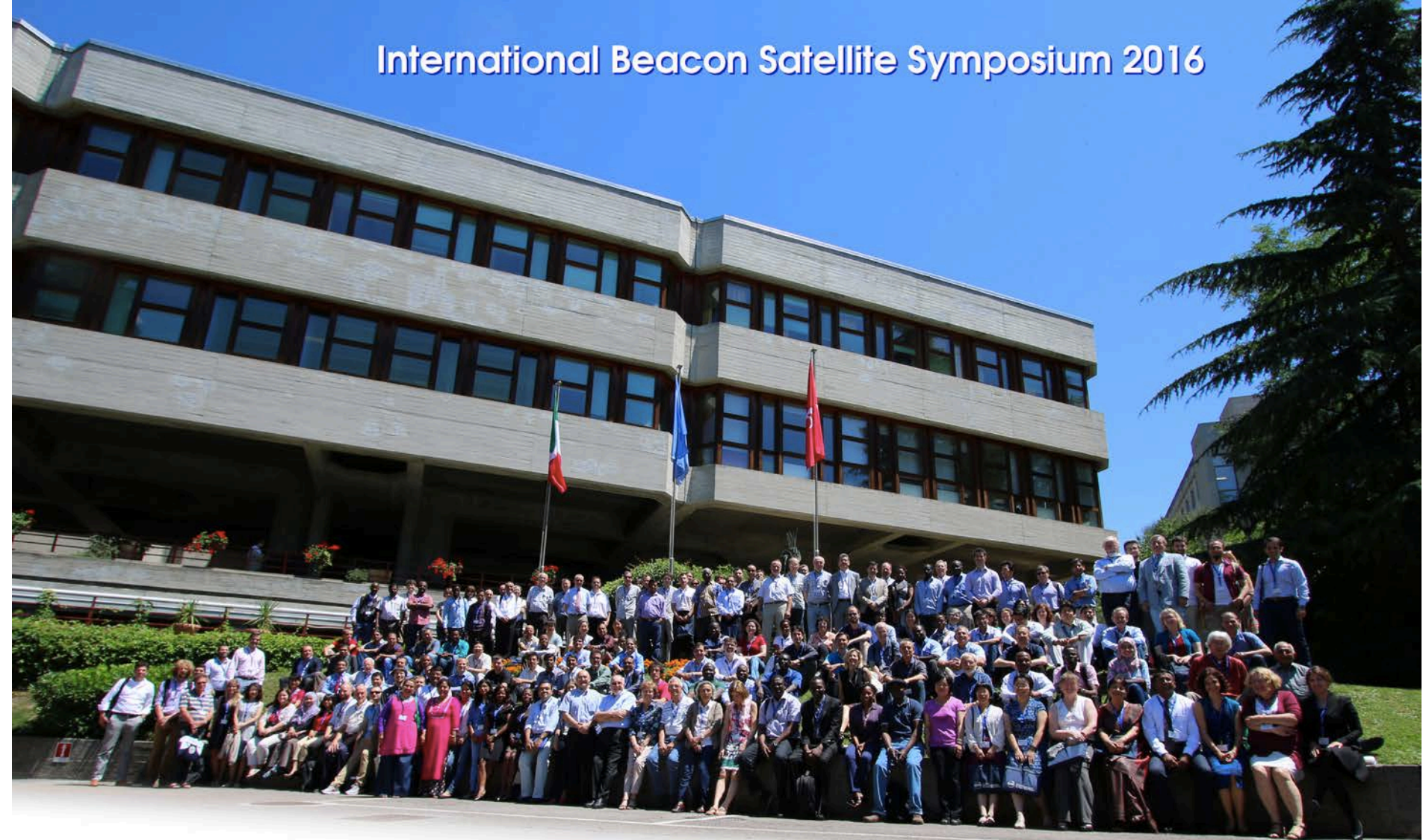


# International Beacon Satellite Symposium 2016



The Abdus Salam  
**International Centre  
for Theoretical Physics**



United Nations  
Educational, Scientific and  
Cultural Organization



IAEA  
International Atomic Energy Agency

**26 June - 1 July 2016**  
**Miramare, Trieste**



## **Beacon Satellite** SYMPOSIUM 2016

### **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**

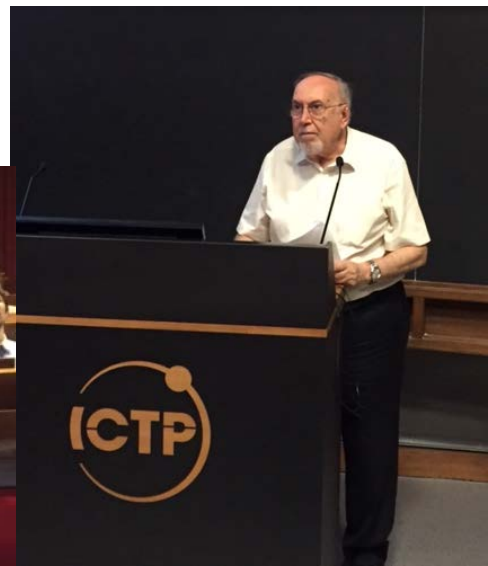
Over 248 abstracts submitted. Accepted 118 Oral Presentations and 65 Posters.

**Paper and Presentation Qualities were Impressive**





# Beacon Satellite SYMPOSIUM 2016





**Beacon Satellite**  
SYMPOSIUM 2016

**Thank you once again to the:**

## **Scientific Organizing Committee**

For the design and organization of the topics for this symposium.

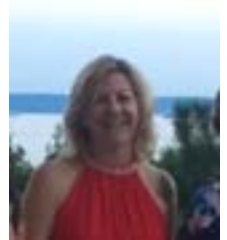
## **Session Chairs**

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

## **Local Organizing Committee and Chairs**

For their welcome hospitality and tireless support before, during (and after) the symposium

Professor Radicella, Bruno Nava, **Pandora Malchose**, Katy Alazo and Yenca Migoya-Orue, Stanka Tanaskovic



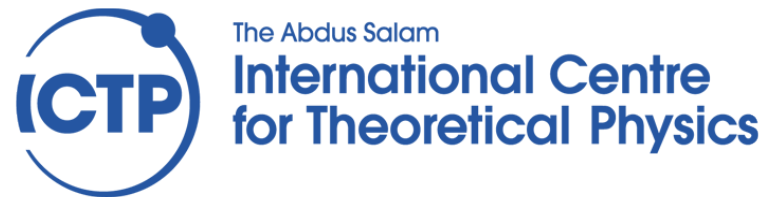
## **Sponsors**

ICTP, Boston College, URSI, UNOOSA, NSF, NASA, AFOSR and EGU





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



**On behalf of the Beacon Satellite  
Studies Group of URSI Commission G**

**To ICTP  
With grateful appreciation for hosting  
the 19<sup>th</sup> International Beacon Satellite  
Symposium  
27 June – 1 July 2016**



**Beacon Satellite**  
SYMPOSIUM 2016

## **YOUNG SCIENTIST AWARDS**

**These awards were selected from the poster presentations.**

**Candidates were limited by age (<40)**

### **Criteria:**

- **Design**
- **Presentation**
- **Relevance to this Symposium**

Thank you to poster chairs:  
Katy Alazo, Yenca Migoya-Orue and Gopi Seemala

### **Judges:**

- **Poster session chairs**
- **Oral session chairs**



## **BEST PRESENTATION AWARDS (1)**

Space and Ground Based TEC and Measurements: **Mamoru Yamamoto** for Realtime three-dimensional tomography of the ionosphere over Japan based on the GEONET GPS-TEC

Irregularities and Scintillation Measurements and Effects: **Irina Zakharenkova** for GPS measurements onboard SWARM satellites to study occurrence of the equatorial irregularities in the topside ionosphere.

Polar (high-latitude) Effects on GNSS: **Alan Wood**, Modeling plasma structures in the high latitude ionosphere.

Theory and Modeling of Ionospheric Scintillation and Irregularities: **Charles Carrano** for Constrained and Unconstrained Power Law Irregularity Models for Interpreting Strong Scintillation Data

Monitoring Natural Hazards, **Elivra Astafyeva** for New in Ionospheric Seismology: Recent Advances in the Space Detection of Earthquakes, Tsunamis and Volcano Eruptions

## **BEST PRESENTATION AWARDS (2)**

Data Assimilation Modeling: **David Minkwitz** for 3D kriging of the ionosphere based on maximum likelihood and restricted maximum likelihood estimation of a non-stationary covariance model.

Advances in Ionosphere-Thermosphere Modeling and the Challenge of Validation: **Sean Elvidge** for A Community Wide Ionosphere/Thermosphere Modeling Test

Radio Occultation Technologies and Measurements: **Tian Mao**, First ionospheric radio occultation measurements from GNSS Occultation Sounder on the Chinese Feng Yun 3C Satellite

Ionospheric Effects on Satellite Based Navigation Systems: **Oladipo Emmanuel Abe** for Assessment Study of Ionosphere Threat: Model using Multi-Shell Algorithm Approach over Sub-Saharan African Region

Space Weather Effects:





**Beacon Satellite**  
SYMPOSIUM 2016



## What's Next:

Papers will be made available on the Boston College website:

<http://isrconferences.bc.edu/beacon/>

If you do not wish to have your presentation available, please let us know very soon.

**A Special Issue of Radio Science is planned:**  
**Information will be sent to all participants.**  
**Deadline for submission is October 1, 2016**

**RADIO  
SCIENCE**  
Volume 51, Number 4, December 2016  
ISSN 1070-3021



## Radio Science Bulletin:

**Will initiate a special column on Beacon Satellite Studies in the Radio Science Bulletin. 1<sup>st</sup> one will focus on this meeting. Following issues will feature articles from this community.**

# 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



Current Leadership:

Chair: Patricia Doherty, USA

Mr. Bruno Nava, Italy

Dr. Andrzej Krankowski, Poland





Lindau 1970



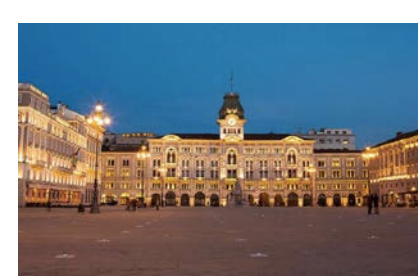
Bath 2013



Barcelona 2010



Boston 2007



Trieste 2004



Graz 1972



Moscow 1974



Boston 1976



# Beacon Satellite SYMPOSIUM 2016



Miramare Castle, Trieste, Italy



Boston 2001



Sopron 1997



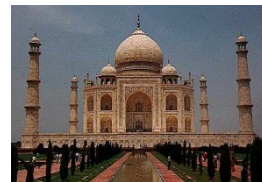
Aberystwyth 1994



Firenze 1978



Warsaw 1980



New Delhi 1983



Oulu 1986



Beijing 1988



Tucuman 1990



Boston 1992





Lindau 1970



Trieste, Italy



Bath 2013



Barcelona 2010



Boston 2007



Trieste 2004



Graz 1972



**Beacon Satellite**  
SYMPOSIUM 2019

**OLSZTYN, POLAND**

University of Warmia and Mazury



Moscow 1974



Boston 1976



Sopron 1997



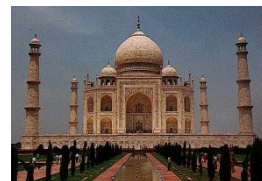
Aberystwyth 1994



Firenze 1978



Warsaw 1980



New Delhi 1983



Oulu 1986



Beijing 1988



Tucuman 1990



Boston 1992



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

Hope to see you in Poland in 2019.



Miramare  
Castle  
Trieste, Italy



Mirow Castle  
Oltszyn, Poland