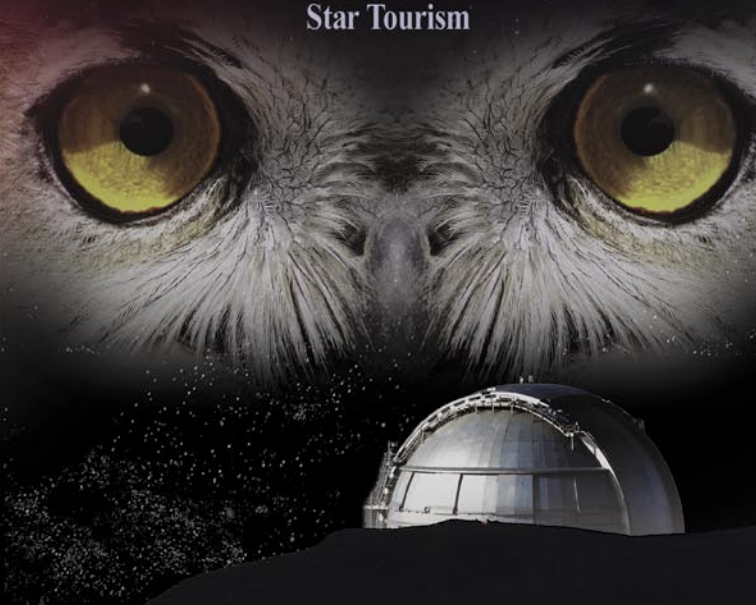




WHERE THE EARTH MEETS THE UNIVERSE

International Workshop and Expert Meeting

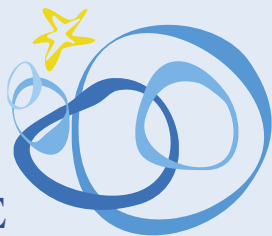
Starlight Reserves
World Heritage
Intelligent Lighting and Night Sky Protection
Star Tourism



La Palma, November 9-10, 2009



WHERE THE EARTH MEETS THE UNIVERSE



“An unpolluted night sky that allows the enjoyment and contemplation of the firmament should be considered an inalienable right of humankind equivalent to all other environmental, social, and cultural rights, due to its impact on the development of all peoples and on the conservation of biodiversity.”

Declaration in Defence of the Night Sky and the Right to Starlight. La Palma, Spain 2007.

“The meeting encouraged States Parties to develop appropriate frameworks for the protection of dark skies, and where these are in place to implement and respect them. Where legally protected Starlight Reserves are already in place States Parties should ensure local level efficient management and enforcement of criteria covering the wider tourism experience, the local inhabitants, climate change, cultural, astronomical, and natural issues, noting that failure to do so may result in withdrawal of reserve status”.

Starlight Reserves and World Heritage International Workshop and Expert Meeting. Fuerteventura, Spain 2009.

“Tangible astronomical heritage is the material evidence relating to astronomy and representations of astronomy. Astronomy is characterised by the observation and coherent interpretation of celestial objects and events from the earliest stages of human evolution through to the modern world, including but not confined to the history of contemporary science. It forms part of the efforts by all human beings to comprehend the observable world or universe—the cosmos—within which they dwell and to understand their place within it”.

Final Resolution International Conference “Astronomy and World Heritage: Across Time and Continents”. Kazan, Tatarstan, Russian Federation 2009.

“Protection of the astronomical quality of areas suitable for scientific observation of the Universe should be taken into account when developing and evaluating national and international scientific and environmental policies, with due regard to local cultural and natural values”.

RESOLUTION B5 in Defence of the Night Sky and the Right to Starlight. IAU General Assembly 2009. Rio de Janeiro. Brazil.

November 8th, 2009

Reception Cocktail – Hotel Taburiente 20:30 h.

Star Observation - Organized by ASTROTOUR-ISLA BONITA

November 9th, 2009

Starlight Workshop

Close to the finalisation of the International Year of Astronomy, the aim of this open workshop is to make us think over the important progress made in night sky defence and preservation of the associated cultural, scientific and environmental heritage, as well as the objectives and challenges of future beyond IYA 2009.

9.30 h

Opening session

Guadalupe González Taño

President, Cabildo de La Palma

Francisco Sánchez

Director. Instituto de Astrofísica de Canarias (IAC)

Jaime Sicilia

Mayor of Breña Baja - La Palma

Luis Ramallo Massanet

President

Spanish National Commission for UNESCO

Alberto Delgado

Vice-Councillor for Culture and Sports

Canary Islands Government

Miguel Angel Pulido

Vice-Councillor for Land Planning

Canary Islands Government

Anna Sidorenko Dulom

Coordinator – Thematic Initiative Astronomy and World Heritage.

UNESCO World Heritage Centre

Malcolm G. Smith

President of IAU Division XII (2006-2009)

10.00 h.

Coffee Break

TOPICS:

- **UNESCO's Astronomy and World Heritage Initiative**
- **Cultural and Natural Heritage**
- **Science, Technology and World Heritage**
- **Windows to the Universe**

10.15 h

Chair: Francisco Sánchez

Director of the Instituto de Astrofísica de Canarias (IAC)

KEYNOTE SPEAKER

HERITAGE SITES OF ASTRONOMY IN THE CONTEXT OF THE UNESCO WORLD HERITAGE CONVENTION

Clive L.N. Ruggles

Chair of the IAU/UNESCO Scientific Working Group on Astronomical Heritage.

ASTRONOMY AND WORLD HERITAGE INITIATIVE

Anna Sidorenko Dulom

Coordinator, Astronomy and World Heritage. UNESCO WHC.

STONEHENGE - THE CHALLENGES OF MANAGING A WORLD HERITAGE SITE

Isabelle Bedu

Coordinator, Stonehenge World Heritage Site. UK.

THE STARLIGHT INTERNATIONAL INITIATIVE IN THE FRAMEWORK OF THE UNESCO-MAB PROGRAMME

Blasco Martín

La Palma Biosphere Reserve

THE OUTSTANDING VALUES: WINDOWS TO THE UNIVERSE

PROCESS OF SELECTION OF EXCEPTIONAL OBSERVING SITES

Richard Wainscoat

University of Hawaii, Institute for Astronomy, USA.

Chair of the IAU working group on controlling light pollution.

OBSERVING SITES CHARACTERIZATION AND CRITERIA

Casiana Muñoz

Instituto de Astrofísica de Canarias (IAC)

LAKE TEKAPO AORAKI/MTCOOK STARLIGHT RESERVE INITIATIVE. A PIONEER PROPOSAL FOR WORLD HERITAGE.

Margaret Austin

Chair of the Mackenzie Tourism and Development Trust Working Party on the Tekapo Aoraki/Mt Cook Starlight Reserve Initiative. NZ.

ADDITIONAL COMMENTS AND REMARKS

Cipriano Marín

Coordinator of the Starlight Initiative

12.00 h.

Coffee Break

TOPICS:

- **Why Starlight reserves are necessary?**
- **Ecological integrity of natural environments: preserving natural darkness**
- **Re-discovering Nightscapes**
- **Starlight and Dark Sky Parks and Reserves experiences**

12.15 h

Chair: Margaret Austin

Chair of the Mackenzie Tourism and Development Trust Working Party on the Tekapo Aoraki/Mt Cook Starlight Reserve Initiative. NZ.

THE DARK SIDE OF PARKS:

WHY AND HOW SHOULD NATURAL DARKNESS BE MANAGED IN PROTECTED AREAS

David Welch

Chair, Dark Skies Advisory Group (IUCN)

THE CHALLENGE OF DOÑANA AS A STARLIGHT RESERVE

Juan José Negro

Vice-director of the Doñana Biological Station
CSIC (Higher Council for Scientific Research - Spain)

ALPINE STARLIGHT: OASIS AND RESERVE

AUSTRIAN OPTIONS AND THEIR CHARACTERISATION

Günther Wuchterl

Thüringer Landessternwarte Tautenburg (Germany)
Kuffner-Sternwarte[.at] (Austria)

FUERTEVENTURA STARLIGHT RESERVE ROADMAP

Tony Gallardo

Fuerteventura Biosphere Reserve
Environmental Manager, Cabildo de Fuerteventura

**DARKSKY RESERVES, PARKS AND COMMUNITIES
CONCEPT OF IDA**

Kim Patten & Friedel Pas

International Dark Sky Association

NEW CHALLENGES FOR PROTECTED WILDLIFE AREAS IN NORTHERN CHILE: ASTRONOMICAL TOURISM AND NOCTURNAL NATURAL ENVIRONMENT PROTECTION.

Pedro Sanhueza

Director of OPCC (Chile)

13.45 h.

Lunch

Session 3

Intelligent Lighting, climate change and sustainable development

TOPICS:

- Measuring and fighting light pollution
- Guidelines, recommendations and regulations
- Best Practices and successful cases
- Protection of the sky in urban and rural areas

15.15 h

Chair: Richard Wainscoat

University of Hawaii, Institute for Astronomy, USA.

Chair of the IAU working group on controlling light pollution.

LIGHT POLLUTION: PRESENT AND FUTURE OF ITS REDUCTION

Fabio Falchi

ISTIL (Light Pollution Science and Technology Institute)

President of Cielo Buio (Italy)

THE CANARY ISLANDS' SKY LAW : EXPERIENCES, FOLLOW-UP AND MEASURES

Francisco Javier Díaz Castro - Federico de La Paz

OTPC-IAC

A FAITHFUL AND CONTRASTED IMAGE OF LIGHT POLLUTION OF OUR CITIES

Carlos Cifuentes Gutiérrez - Javier Calonge

Consultoría Lumínica - Spain

IDENTIFYING AND CLASSIFYING DARK SKY SITES IN CENTRAL EUROPE

Andreas Hänel

Dark Sky Germany. Museum am Schölerberg, Osnabrück.

EXPERIENCES IN LIGHT POLLUTION EVALUATION AND MANAGEMENT IN URBAN AREAS - IMPACT ASSESSMENT IN OPEN AREAS.

Alberto Bañuelos Irusta

AAC Centro de Acústica Aplicada S.L.

THE LEGAL PROTECTION OF THE NIGHT SKY AND DARK SKY PLACES

Martin Morgan-Taylor

School of Law. DeMonfort University. Leicester. UK.

LEGAL CONCERNS FOR STARLIGHT RESERVES AND THE ENVIRONMENT

Phil Cameron

Space Travel Law Association - STELA (USA)

ACTIVITIES OF THE SPANISH DSA CORNERSTONE PROJECT

Fernando Jáuregui

Planetarium of Pamplona. DSA Spanish node of IYA2009.

17.15 h.

Coffee Break



Session 4

Beyond Starlight: Tourism and Education

TOPICS:

- International campaigns and IYA
- Discovering stars, a vector of knowledge and education
- The role of education
- Tourism, science and starlight
- Destinations under the stars

17.30 h

Chair: Maguelonne Déjeant-Pons

Council of Europe - European Landscape Convention

BUILDING ON IYA: THE DARK SKIES AWARENESS PROGRAMS

Constance Walker

National Optical Astronomy Observatory (NOAO). USA.

IYA2009 Dark Skies Awareness Cornerstone Project

THE PRESERVATION OF THE NIGHT SKY ENVIRONMENT FOR EDUCATION AND THE PUBLIC

Margarita Metaxa

Philekpaideutiki Etaireia, Greece

IAU Com 46, 50

STARS, LAND AND SEA: A NEW TOURIST AND EDUCATIONAL RESOURCE IN THE AMALFI COAST (WHS)

Vincenzo Sannino

Associazione Costiera Amalfitana Riserva Biosfera

THE ONK JMEL (TUNISIAN DESERT) DARK SKY: FROM "STAR WAR" MOVIE TO STAR OBSERVATION

Mohamed Hédi Ben Ismaïl

Director General - Tunis Science City

NIGHT OF DARKNESS IN BELGIUM

Friedel Pas

International Dark Sky Association (Europe)

LA PALMA: A WINDOW TO THE UNIVERSE

Antonio González* - Carlos Fernández**

* ASTROTOUR – Isla Bonita

**Project Director. Isla Bonita Rural Tourism Association

DARK SKY CAMPAIGN IN MURCIA

Francisco Fernández

Cel Fosc, Asociación contra la Contaminación Lumínica

THE EXPERIENCE AT ROQUE DE LOS MUCHACHOS

Juan Carlos Pérez Arencibia

ORM Administrator (IAC)

SCIENCE AND TOURISM: SL DESTINATIONS & CERTIFICATION

IAC & Fuerteventura BR – Affiliated Member of UN-WTO

19.45 h.

End of the Session

Expert Meeting

After the Fuerteventura meeting (Starlight Reserves and World Heritage: Scientific, Cultural and Environmental Values, April 2009), and taking into account the Kazan recommendations (UNESCO-IAU Conference on Astronomy and World Heritage, August 2009), the group of experts has been convoked with the aim to go forward on the identification of case studies, contents and proposals of natural areas, nightscapes and exceptional sites for astronomical observation that should be included in the World Heritage List.

A second objective is to analyse and propose coordination, dissemination and networking actions to promote the defence of star-related cultural, scientific and natural heritage, and of those places that can be promoted as starlight and dark sky reserves.

Chair of the Expert Meeting: Juan Antonio Menéndez Pidal
Unión Latina - Starlight Scientific Committee

Session 1: The Windows of the Universe

9: 30 h Chair: **Malcolm Smith**

President of IAU Division XII (2006-2009)

OBJECTIVES AND CONTENTS:

- **Sites with exceptional astronomical observation values. Selection process.**
- **Scientific criteria and evaluation of sites**
- **Case Studies**
- **Serial nomination proposal**

Session 2 Natural Areas and Nightscapes

11: 30 h Chair: **David Welch**

Chair, Dark Skies Advisory Group (IUCN)

OBJECTIVES AND CONTENTS:

- **Recommendations and proposals by IUCN Dark Skies Advisory Group (DSAG).**
- **Criteria for starlight reserves/ dark sky preserves, regardless of world heritage status.**
- **The importance of dark sky practices in protected areas, even if they are not starlight reserves/ dark sky preserves.**
- **Management practices for dark sky friendly parks and reserves, e.g. outdoor lighting standards.**
- **Promotion of scotobiology/ecology of the night research.**
- **Interpretive and educational opportunities for protected areas related to ecology of the night and starlight.**
- **Community outreach, using protected area values to help reduce sky glow and distant glare sources.**
- **Procedures for delivering IUCN advice.**

Session 3

Accompanying measures and coordination

16:30 h Chair: **Juan José Negro**

Vice-director of the Doñana Biological Station
CSIC (Higher Council for Scientific Research - Spain)

OBJECTIVES AND CONTENTS:

- Information exchange and networking
- Information systems and dissemination
- The role of networks of protected areas which can be the start of night sky defence. The MaB Programme and Biosphere Reserves.
- New commitments by international organisations and bodies and their involvement in this action.
- Synergies between the participating organisations and working groups: IAU/UNESCO SWGAH, IUCN Dark Skies Advisory Group, DSA (IYA 2009), Starlight Initiative, IDA (Dark Sky Association)...
- Actions regarding education and promotion of starlight tourism.

Institutional Coordinator's Meeting: **Luis Martínez** (IAC)
Organization of the meeting: Laura Calero, Cipriano Marín



LA PALMA, NOVEMBER 9-10, 2009



HOTASA TABURIENTE PLAYA



Venue:

Hotel Hotasa Taburiente Playa
Playa de los Cancajos - Breña Baja
La Palma – Canary Islands - Spain
Tel.: +34 922 18.12.77

http://www.hotasa.com/taburiente_playa_la_palma.html

Conference contact:
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Tel.: +34 922 209102
e-mail: starlight@iac.es

STARLIGHT 2009

WHERE THE EARTH MEETS THE UNIVERSE

“Astronomy and World Heritage: across time and continents” is a cycle of UNESCO-World Heritage activities which will be launched within the framework of the World Heritage Initiative on Astronomical Heritage during the celebration of the International Year of Astronomy, IYA2009.

The International Workshop and expert meeting “Where the Earth meets the Universe” is organised by the IAC (Instituto de Astrofísica de Canarias) in the framework of the “Septenium” activities of the Canary Islands’ Government. °

www.starlight2009.net

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