

COMMUNITY PROJECTS  
THE SPIRIT OF "LA CAIXA"

**COSMOCAIXA**  
BARCELONA

# THE POLAR REGIONS AND GLOBAL WARMING



Photo: Jerónimo López

Scientific Symposium  
Barcelona, 20 April 2007



**Obra Social**  
Fundación "la Caixa"

THE POLAR REGIONS PLAY A KEY ROLE IN THE GLOBAL CLIMATE SYSTEM OF OUR PLANET; THEY AFFECT THE RECEIPT OF SOLAR RADIATION, AND HAVE AN IMPACT ON OCEANS, CURRENTS, THE ATMOSPHERE AND THE LAND, AND, BY EXTENSION, ON ENVIRONMENTS, ECOSYSTEMS AND HUMAN ACTIVITIES. IN RECENT YEARS, THE POLAR REGIONS HAVE UNDERGONE DRAMATIC CHANGES, SOME AREAS EXPERIENCING CLIMATIC VARIATIONS WHICH ARE FAR HIGHER THAN THE GLOBAL AVERAGE. CLIMATE CHANGE IN THE POLAR REGIONS ACTS AS AN EARLY-WARNING SYSTEM FOR THE GLOBAL ENVIRONMENTAL SYSTEM.

THE INTERNATIONAL POLAR YEAR 2007-2008, IS A SCIENTIFIC INITIATIVE, INTERDISCIPLINARY IN ITS APPROACH AND TRULY INTERNATIONAL IN PARTICIPATION. IT WILL BE HELD FROM MARCH 2007 TO MARCH 2009 AND PROMOTED BY TWO INTERNATIONAL SCIENTIFIC ORGANISATIONS, THE INTERNATIONAL COUNCIL FOR SCIENCE (ICSU) AND THE WORLD METEOROLOGICAL ORGANISATION (WMO). IN THE FRAMEWORK OF THIS INITIATIVE, THE ENVIRONMENT AND SCIENCE DIVISION OF THE FUNDACIÓN "LA CAIXA" SOCIAL WORK DIVISION IS PREPARING A PROGRAMME OF ACTIVITIES WHICH SHALL BEGIN WITH THIS SEMINAR AT COSMOCAIXA BARCELONA.

## SCIENTIFIC DIRECTORS

### **Jerónimo López**

Professor at *Universidad Autónoma de Madrid*, Member of the ICSU-WMO Joint Committee for the International Polar Year, President of the Spanish SCAR Committee

### **Josep Maria Gili**

Research Professor, *CSIC-Institut de Ciències del Mar*, Barcelona, Spain

### **Antoni Rosell**

ICREA Research Professor, *Institut de Ciència y Tecnologia Ambiental, Universitat Autònoma de Barcelona*, Spain

# SYMPOSIUM PROGRAM

Friday, April, 20

## 10.00 h Opening

### PRESENTATION OF THE MEETING

Antoni Rosell

### THE POLAR REGIONS AND THE INTERNATIONAL POLAR YEAR

Jerónimo López

## 10.45 h

### THE ROLE OF POLAR OCEANS IN THE CLIMATE SYSTEM

Eberhard Fahrback

Climate Sciences Division, Alfred Wegener Institute for Polar and Marine Research, Germany. Member of the ICSU-WMO Joint Committee for the International Polar Year

## 11.30 h Coffee break

## 12.00 h

### FROM HERE TO ETERNITY, GLOBAL WARMING IN GEOLOGICAL TIMES

David Archer

Department of Geophysical Sciences, University of Chicago, USA

## 12.45 h

### ARCTIC WARMTH, GREENLAND MELTING AND SEA-LEVEL RISE: LESSONS FROM THE PAST

Bette L. Otto-Bliesner

Climate and Global Dynamics Division, National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA

## 13.30 h Lunch

## 15.00 h

### LIFE IN THE MARINE DEPTHS OF THE ANTARCTIC: A LESSON FROM THE PAST THAT GIVES US HINTS ABOUT THE FUTURE OF ANTARCTIC BIODIVERSITY

Josep Maria Gili

Research Professor, CSIC - Institut de Ciències del Mar, Barcelona, Spain

## 15.45 h

### ECOLOGICAL AND SOCIETAL CONSEQUENCES OF CLIMATE WARMING

F. Stuart Chapin III

Department of Biology and Wildlife, Institute of Arctic Biology, University of Alaska, USA

## 16.30 h Coffee break

## 17.00 h Round table with all participants

### AND WHAT ABOUT TOMORROW? ROUTE MAP

Moderator: Rainer Zahn

ICREA Research Professor, Institut de Ciència y Tecnologia Ambiental, Universitat Autònoma de Barcelona, Spain

## 18.00 h End of the meeting

# COSMOCAIXA

Teodor Roviralta, 47-51 | Barcelona 08022

## VISITOR SERVICE

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## OPENING TIMES

Open Tuesday to Sunday 10 to 20 h

Closed Mondays (except public holidays)

## ENTRANCES

Ronda de Dalt between calle C ster and

Avinguda del Tibidabo (exits 6 and 7)

Calle Quatre Camins, 89

## TRANSPORT



17 | 22 | 58 | 60 | 73 | 75 | 196



Ferrocarrils de la Generalitat de Catalunya  
(Avinguda del Tibidabo station)



Tramvia Blau (Blue Tram)



Entrance on calle Quatre Camins, 89 (1euro/hour)

Coaches: Ronda de Dalt opposite CosmoCaixa

## MUSEUM SHOP

Laie - CosmoCaixa

## CAFETERIA - RESTAURANT

Arcasa - CosmoCaixa

## INFORMATION SERVICE

OBRA SOCIAL FUNDACI LA CAIXA

Tel. 93 495 39 45

Monday to Sunday 9 to 20 h

[www.laCaixa.es/ObraSocial](http://www.laCaixa.es/ObraSocial)

## PRICE

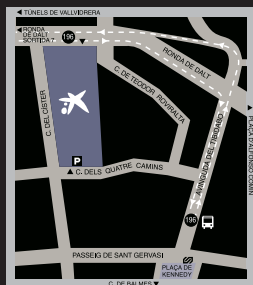
6 euros - Reduced rate 4 euros

## REGISTRATION

[www.laCaixa.es/ObraSocial](http://www.laCaixa.es/ObraSocial)

Places limited

There will be simultaneous translation



Design: excéntric



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