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# ESF Research Conferences

A Programme of the European Science Foundation

## Polar Regions and Quaternary Climate EuroConference toward an Integrative View of Climate in Antarctica and Circum-Antarctic Regions

Supported by the European Commission, Research DG, Human Potential Programme,  
High-Level Scientific Conferences (Contract No: HPCF-CT-2002-00173)

Acquafredda di Maratea (near Naples), Italy, 24-29 September 2005

Chair: **Jérôme Chappellaz** (F, LGGE, CNRS-UJF, Grenoble, F)

Vice-Chair: **Carlo Barbante** (I, Venice University, I)

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Laboratoire de Glaciologie et Géophysique de l'Environnement (CNRS-UJF Grenoble, F)



Laboratoire de Glaciologie et Géophysique de l'Environnement

Basilicata Region (I)

### Final Programme

On line at: <http://www.esf.org/conferences/lc05115>

#### Saturday 24 September

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Late afternoon /  
early evening

Registration at the hotel reception and ESF desk

19.30

Welcome drink

20.00

Dinner

#### Sunday 25 September

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08.30-09.00

Conference opening

## Session 1: Antarctic climate: an ice core synthesis

Chair: Jean Jouzel (Laboratoire des Sciences du Climat et de l'Environnement, Gif-sur-Yvette, F)

- 09.00-09.30           **Kumiko Goto-Azuma** (National Institute of Polar Research, Tokyo, JP)  
*The Dome Fuji ice core record*
- 09.30-10.00          **Kendrick Taylor** (Desert Research Institute, Reno, NV, US)  
*The West Antarctic Ice Sheet project*
- 10.00-10.30          **Heinz Miller** (Alfred-Wegener Institute, Bremerhaven, D)  
*EPICA – Dronning Maud Land ice core*
- 10.30-11.00          Coffee break
- 11.00-11.30          **Eric Wolff** (British Antarctic Survey, Cambridge, UK)  
*EPICA – Dome C ice core*
- 11.30-11.50          **Cunde Xiao** (China Meteorological Administration, Beijing, CN)  
*The Dome A ice core project*
- 11.50-12.10          **Robert Mulvaney** (British Antarctic Survey, Cambridge, UK)  
*The Berkner Island ice core*
- 12.10-13.00          Round-table chaired by **Jean Jouzel** (Laboratoire des Sciences du Climat  
et de l'Environnement, Gif-sur-Yvette, F)  
*Synthesis of ice core records in Antarctica : common signals, major  
differences*
- 13.00                  Lunch

## Session 2: The circum-Antarctic regions and their link with Antarctica

Chair: Carlo Barbante (University of Venice, I)

- 14.30-15.00          **Rainer Gersonde** (Alfred-Wegener Institute, Bremerhaven, D)  
*The link between Antarctica and the southern ocean*
- 15.00-15.30          **Cathy Whitlock** (Montana State University, Bozeman, MT, US)  
*Terrestrial climate archives in the southern south Americas*
- 15.30-16.00          **Rainer Zahn** (ICREA, Barcelona, E)  
*Southern ocean and the meridional overturning circulation*
- 16.00-16.30          Coffee break
- 16.30-17.00          **Patrick De Deckker** (Australian National University, Canberra, AU)  
*Terrestrial archives in Austral-Asia and their link with Antarctic and  
circum-Antarctic climate*
- 17.00-17.30          **Thomas Stocker** (University of Bern, CH)  
*Ocean/climate modelling: linking the Antarctic continent to global  
dynamics*
- 19.00                  Dinner

## Monday 26 September

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### Session 3: Dating what progresses on the Achille heel of temporal archives?

Chair: Thomas Stocker (University of Bern, CH)

- 09.00-09.30           **Jérôme Chappellaz** (Laboratoire de Glaciologie et Géophysique de l'Environnement, Grenoble, F)  
*Synchronization of ice cores using gas records*
- 09.30-10.00          **Grant Raisbeck** (Centre de Spectrométrie Nucléaire et de Spectrométrie de Masse, Orsay, F)  
*Radiochronological tools: recent developments and prospects for ice cores*
- 10.00-10.30          **Claire Waelbroeck** (Laboratoire des Sciences du Climat et de l'Environnement, Gif-sur-Yvette, F)  
*Marine and ice core records: towards a coherent picture*
- 10.30-11.00          Coffee break
- 11.00-13.00          Round-table chaired by **Claire Waelbroeck** (Laboratoire des Sciences du Climat et de l'Environnement, Gif-sur-Yvette, F)  
*Dating and correlation of ice, marine and terrestrial records, link with external forcing.*  
Introduction through 5 mn presentation of selected posters.
- 13.00                  Lunch
- 14.30-17.30          Poster session # 1
- 16.00-16.30          Coffee break in parallel to poster session
- 19.00                  Dinner

## Tuesday 27 September

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### Session 4: Antarctic ice sheet dynamics and its impact on climate

Chair: Martin Siegert (University of Bristol, UK)

- 08.30-09.00          **Frank Pattyn** (Vrije University, Brussels, B)  
*Antarctic ice sheet modelling*
- 09.00-09.30          **Catherine Ritz** (Laboratoire de Glaciologie et Géophysique de l'Environnement, Grenoble, F)  
*Climate response of ice sheets*
- 09.30-10.15          Round-table chaired by **Martin Siegert** (University of Bristol, UK)  
*Sea-level changes and the role of Antarctica*
- 10.15-10.45          Coffee break in parallel to poster session
- 10.15-13.15          Poster session # 2
- 13.15                  Lunch
- 14.30                  Half-day excursion
- 20.00                  Aperitif and Conference Dinner

## Wednesday 28 September

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### Session 5: Atmospheric physics and chemistry in south polar regions: what can we learn from ice-core chemistry and atmospheric modelling?

Chair: Eric Wolff (British Antarctic Survey, Cambridge, UK)

- 09.00-09.30           **Hubertus Fischer** (Alfred-Wegener Institute, Bremerhaven, D)  
*Aerosol records in ice cores*
- 09.30-10.00          **Carlo Barbante** (University of Venice, I)  
*Trace-element records in ice cores*
- 10.00-10.30          **Christophe Genthon** (Laboratoire de Glaciologie et Géophysique de  
l'Environnement, Grenoble, F)  
*Antarctic climate and tracer-transport modelling*
- 10.30-11.00          Coffee break

### Session 6: Present-day observations in Antarctica: hints for future ice-core investigations

Chair: Jorg-Peter Steffensen (University of Copenhagen, DK)

- 11.00-11.30          **Stefania Argentini** (Consiglio Nazionale delle Ricerche, Roma, I)  
*Antarctic meteorology*
- 11.30-12.00          **Rolf Weller** (Alfred-Wegener Institute, Bremerhaven, D)  
*Air/snow transfer studies of aerosols and trace gases*
- 12.00-12.30          **Martin Siegert** (University of Bristol, UK)  
*Remote sensing and airborne studies of Antarctica*
- 12.30                   Lunch
- 14.00-16.00          Round-table chaired by **Hubertus Fischer** and **Rainer Gersonde**  
(Alfred-Wegener Institute, Bremerhaven, D)  
*Improvement and integration of ice and non-ice proxies.*  
Introduction through 5 mn presentation of selected posters.
- 16.00-16.30          Coffee break
- 16.30-17.30          Round-table chaired by **Jorg-Peter Steffensen** (University of  
Copenhagen, DK)  
*The future of ice cores.*  
Introduction by Eric Wolff : "The IPICS initiative".
- 17.30-18.00          **Carlo Barbante** (University of Venice, I)  
Special discussion about the future of the conference series
- 19.00                   Dinner

## Thursday 29 September

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- 08.30                   Breakfast and departure

**All posters are accepted**, unless the Conference Chair informs you otherwise.