

>Scientific Committee

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>Conference Information

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>Local accommodation info point

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>How to reach the Conference Site

From
the Airport Torino Caselle:
bus SADEM, line 27:
Caselle Aeroporto – Torino
(downtown station Porta Nuova).

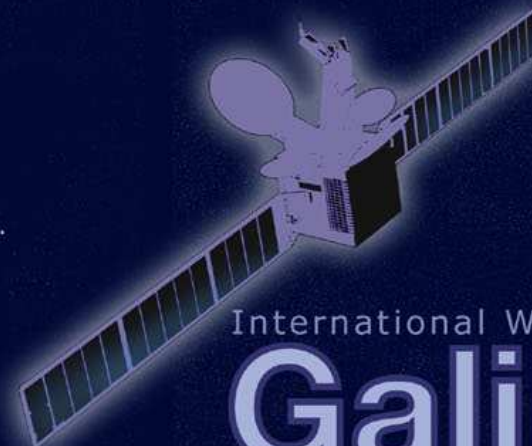
From
downtown station Porta Nuova:
10 minutes walking.

Taxi:
about 30 minutes from
the Airport Torino Caselle;
about 5 minutes from
the train station Porta Nuova

For details, maps and other information
about transport, please visit the conference
web site www.galileotime.org



I.N.R.I.M
Istituto Nazionale di
Ricerca Metrologica



International Workshop on Galileo 27 SEPT 04 TIME

Sala dei Duecento
Centro Congressi dell'Unione Industriale
Via Fanti 17, I10128 - Torino (Italy)



> MODELLING AND CHARACTERIZATION OF ATOMIC CLOCKS <

September 27th-28th, 2004

www.galileotime.org



This workshop, based on invited talks, is intended to be a meeting for scientists, experts and politicians, providing them with the opportunity to convene and to discuss some of the many pressing issues about the Galileo project, as it is evolving currently in the international environment both from the political and the scientific points of view.

The scientific topics are focused on the open questions of the Galileo Time, concerning the most relevant problems of modelling and characterization of atomic clocks and time signals, the Galileo-system core.

The two-days agenda is subdivided in three main parts:

- Introduction to the present situation:
 - Present status of the GPS-Galileo negotiations
 - State of art of the Galileo project: what is the impact of clocks
- Time synchronization with atomic clocks: modelling, characterization and technical solutions, joining the USA experience on GPS and the EU solutions
- Impacts on Galileo Project and future steps

DAY 1 – 2004, September 27th

9.00 Local Authorities welcome address

9.15 Francesco MAZZUCA
President Association "Solidarietà e Sviluppo"
Introduction to the Workshop

9.30 Tutorial Session I
Fabio PASQUINI
President
"Comitato Promotore Programma Galileo"
GALILEO Program impacts and opportunities on local region
Sergio VETRELLA
President ASI
The Italian initiative for Galileo

11.00 Coffee Break

11.30 Tutorial Session II
Paul FLAMENT
DG TREN Galileo Unit
GALILEO, State of the Art
Marco FALCONE
ESA ESTEC
GALILEO System overview and role of timing

13.00 Lunch

14.00 Atomic Clocks
Donald B. PERCIVAL
University of Washington, Seattle
Modelling of clock behaviour
Franco EMMA
ESA ESTEC
Onboard clocks for GALILEO – Develop status
Pierre THOMANN
Observatoire Cantonal de Neuchâtel
Physical experiments on space-borne clocks
Discussant: **Elio BAVA**
INRIM Commissioner

16.00 Coffee Break

16.30 Relativity effects on space-borne clocks
Carroll O. ALLEY
University of Maryland
Relativity aspects of clocks in space
Fabio CARDONE
University of Rome "La Sapienza"
Characterization of time discrepancies
Discussant: **Noel DIMARCO**
CNRS - Observatoire de Paris

DAY 2 – 2004, September 28th

9.00 Time Transfer
Andreas BAUCH
PTB
Time and frequency transfer and its relation to operation and use of GNSS.
Włodzimierz LEWANDOWSKI
BIPM
The use of Global Navigation Satellite System in the international timekeeping
Discussant: **Stefano LAGRASTA**
Telespazio SpA - ITA

10.45 Coffee Break

11.15 GALILEO Time
Jens HAMMESFAHR
DLR
Precise timing facility: Potential architectures as outcome of Galileo Phase C0 and German GATE studies
Patrizia TAVELLA
IEN "Galileo Ferraris"
Experimental GALILEO System Time: results in the GALILEO System Test Bed V1.
Sergio GRECO
ALENIA Spazio Galileo Division Director
GALILEO: from clock technology to time service provider
Discussant: **Giovanni BUSCA**
ESA Consultant

13.30 Lunch

15.00 Conclusions
Sigfrido LESCHIUTTA
Politecnico Torino
Impacts on GALILEO project
Giuseppe VIRIGLIO
ESA, Head of EU and Industry Directorate
Lesson Learned
Rocco BUTTIGLIONE
Italian Minister for European Policy
Conclusions

