



**The Thirteenth  
International Conference on  
Vacuum Ultraviolet  
Radiation Physics**

**Trieste, July 23-27, 2001  
Stazione Marittima Congress Center**

hosted by:







The 13<sup>th</sup> International Conference  
on

# Vacuum Ultraviolet Radiation Physics



July 23-27, 2001

Stazione Marittima  
Trieste, Italy



CNR



INFN



Organized by  
"ELETTRA"  
Sincrotrone Trieste S.c.p.A.

**Conference Chair**

Massimo Altarelli (Sincrotrone Trieste, Italy)

**Organizing Chair**

Giovanni Comelli (University of Trieste, INFN)

**International Advisory Board Chair**

Ingolf Lindau (MAX-lab, Lund University, Sweden)

**Program Advisory Committee Chair**

Maya Kiskinova (Sincrotrone Trieste, Italy),  
Giorgio Margaritondo (EPFL Lausanne, Switzerland)

**Conference Administrator**

Francesco Antonangeli (Sincrotrone Trieste, Italy)

( email: [vuv13@elettra.trieste.it](mailto:vuv13@elettra.trieste.it)  
Web site: <http://vuv13.elettra.trieste.it> )

**Important dates**

▶ Deadline for advance registration: May 31, 2001

▶ Deadline for accommodation: May 31, 2001

### Time and Place

The Thirteenth International Conference on Vacuum Ultraviolet Radiation Physics (VUV-XIII) will be held on July 23-27, 2001, in Trieste (Italy) at the “Stazione Marittima”. The conference will be hosted by Sincrotrone Trieste, the Istituto Nazionale di Fisica della Materia (INFM) and the Consiglio Nazionale delle Ricerche (CNR).

### Conference Location

The Stazione Marittima Congress Center of Trieste (see location 1 of the map on page 21) is located in the old Trieste passenger terminal for ocean-going ships and it is surrounded by magnificent scenery and Trieste harbour. The Stazione Marittima is walking distance from the city center and many of the downtown hotels.

Bus transportation and taxi service from/to the railway station and the airport are available. The address of the Congress Center is:

#### STAZIONE MARITTIMA

Congress Center  
Molo Bersaglieri 3  
34124 Trieste, Italy  
Tel: (+39 040) 304888  
Fax: (+39 040) 310856

### Scope

VUV-XIII continues a series that began in 1962. The most recent meetings were held in San Francisco (1998), Tokyo (1995), Paris (1992) and Honolulu (1989). The conference encompasses all aspects of theoretical and experimental studies of the interaction of ultraviolet and soft x-ray radiation with matter over a photon-energy range from 5 eV to several keV.

Relevant areas of research include atomic and molecular physics, materials sciences, physics, chemistry, biology and the novel instrumentation required to conduct such research. The major tools of investigation such as synchrotron radiation, lasers, laboratory sources, and plasma sources are important topics, as are the associated optics, technology, and analytical techniques.

### Program

VUV-XIII will begin with registration at the Stazione Marittima on Sunday, July 22<sup>nd</sup>, 2001 from 5 p.m. to 8 p.m. A welcome reception will take place at the Stazione Marittima on Sunday evening from 7 p.m. to 8 p.m.



Accompanying persons are welcome to attend this reception.

This year's program includes plenary and parallel oral sessions and contributed poster sessions, see the Program on page n. 9.

A tour of Elettra will be offered on Friday afternoon, July 27<sup>th</sup>. Accompanying persons are welcome to attend. A Wednesday-night banquet is also planned for that week. See the Events section for more information (page n. 15)

All conference activities except the banquet and the tour will take place at the Stazione Marittima in Trieste.

### Registration

An advance registration form is available at:

<http://vuv13.elettra.trieste.it/vuv13/registration.html>. Participants who have not yet done so should complete the form and return it with full payment by May 31<sup>st</sup>, 2001, to avoid the late fee. The registration fees listed below include entrance to all oral and poster sessions, the book of abstracts, the Conference Proceedings, the welcome reception on Sunday, July 22<sup>nd</sup>, the Banquet on Wednesday evening, all coffee breaks, and the conference kit.

At the Conference, registration can be made on Sunday 22<sup>nd</sup> from 5 p.m. to 8 p.m. and on Monday morning from 8.15 a.m. From Tuesday to Friday the Conference Secretariat will be open from 8.30 a.m. to 1.00 p.m. and from 2.00 to 6.00 p.m.

### Registration Fees

#### Received by May 31<sup>st</sup>, 2001

Regular fee	380 Euro
Student fee	200 Euro

#### Received after May 31<sup>st</sup>, 2001

Regular fee	480 Euro
Student fee	300 Euro

Payments can be made on-line with Credit card (VISA, Master Card, Diners, American Express) or by Money transfer (see the web address <http://vuv13.elettra.trieste.it/vuv13/registration.html>).

Optional events can also be booked at the registration desk. Please see the Accompanying Persons program on page 16.

▶ **Cancellations**

Before 23 June, 2001 refund minus 20% for expenses  
After 23 June, 2001 NO Refund.

▶ **Students**

Students pay a reduced registration fee of Euro 200 as long as we receive the registration on or before May 31<sup>st</sup>. After that date, the student discount price will be Euro 300. A student registration includes all the benefits of a regular registration.

▶ **Accommodation**

Participants must make their own room reservation through the company:

*“the office”*

Via San Nicolo' 14, 34121 Trieste (Italy)

phone +39 040 368343

fax +39 040 368808

e-mail [vuv@theoffice.it](mailto:vuv@theoffice.it)

by selecting the hotel reservation form link at the address:

<http://vuv13.elettra.trieste.it/vuv13/registration.html>

The deadline for room reservation is May 31<sup>st</sup>, 2001.

▶ **Foreign Visitors**

Foreign visitors may require a visa to visit Italy; please, enquire locally whether this applies to your country. If you need a letter from us indicating that you have registered for this conference, please contact *“the office”*, e-mail [vuv@theoffice.it](mailto:vuv@theoffice.it).

▶ **How to Reach Trieste**

**By Air**

Trieste International Airport located at “Ronchi dei Legionari” has direct connections to international airports in Milan, Rome, London and Munich.

There is a bus service (ITL 15,000) between Trieste airport and Trieste bus station (about 45 minutes; tickets can be purchased on the bus). See location 2 of the map on page n. 21.

Buses to town leave shortly after flight arrivals.



For more details, please consult the web address:

<http://www.aeroporto.fvg.it/eng/aeroporto/aeroporto.htm>.

Alternatively, you can take a taxi (about ITL 90,000).

The map of the region around Trieste shows the connections from the city center to the airport.

Flight Information: +39 0481 773 224 / +39 0481 773 225

Bus Service: +39 348 413 5865 / +39 335 5606 987 / +39 040 425 001

Taxi: +39 040 307730.

Ticket office: +39 0481 773 232

Lost and Found: +39 0481 773 227

(Note that the zero in the area code must be included for international calls.

The area code (040 for Trieste) is also used when making local calls.

National flights check-in 30 mins before.

International Flights check-in 60 mins before.

Participants flying into Venice airport “Marco Polo” should take the bus to Mestre Railway Station (about half an hour) and then take a train to Trieste (about two hours).

### By Train

Central railway station (see location 3 of the map on page 21) Trieste.

Daily connections with all major Italian cities and many European capitals (see the web address: <http://www.fs-on-line.com/welcome.html>).

**PLEASE NOTE:** tickets for city bus service can be purchased at newspaper stands.

### By Car

The highway A4 connects Trieste to the rest of Italy and Europe.

## Poster Sessions

### Poster Size:

The space allotted for displaying a poster is 0.9 m high x 1.17 m wide. Material to stick posters to the poster boards will be available at the secretariat desk.

### ▶ Timetable for Poster Preparation:

#### morning

Monday, Tuesday, Wednesday and Thursday

-posters should be mounted from 8.30 to 11.00 a.m. and removed from 12.30 a.m. to 1.00 p.m.



### afternoon

Tuesday

-posters should be mounted from 1.30 to 5.00 p.m. and removed from 6.30 to 7.00 p.m.

Wednesday

-posters should be mounted from 1.30 to 4.30 p.m. and removed from 6.00 to 6.30 p.m.

### Best Poster Prizes

A prize will be assigned to the three best posters submitted by young scientists (under 33 at the date of abstract submission). The prizes will be 500 Euro, 400 Euro and 300 Euro respectively. The selection of the posters to be awarded will take place during the conference. Submitters must be prepared for an oral presentation of their contribution, as the three winners will be invited to give a 15 mins talk plus 5 mins discussion in a dedicated session on Thursday 26<sup>th</sup> from 5.30 to 6.30 p.m.

### Submission to Conference Proceedings

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Manuscripts are to be submitted as printed papers by the deadline of **June 15, 2001**.

Please send **THREE HARDCOPIES**:

one original copy with good quality figures plus two copies for refereeing to the following address:

VUV-XIII Editorial Office  
c/o Sincrotrone Trieste  
S.S. 14 km 163.5 – in Area Science Park  
34012 Basovizza – Trieste  
ITALY

Please indicate the abstract submission number of your paper in the accompanying letter.

If your paper is accepted after refereeing, we will request an electronic version of the paper to accelerate the publication process. Acceptable formats are Word document, RTF, Word Perfect, Tex, or Latex. To avoid any errors in translation of file formats, the final article will be typeset and printed on the basis of the hardcopy which is submitted, so please check very carefully for errors. Galley proofs will NOT be sent.



Templates for manuscripts can be downloaded from the conference web site. The template serves as a guide for style and allows you to estimate the length. Manuscripts should be 5 pages long for poster presentations, 8 pages for invited talks, and 12 pages for plenary talks.

The proceedings will be published in a special issue of *Surface Review and Letters* (<http://www.wspc.com.sg/journals/srl/srl.html>). If any details are unclear, please send a message to: [Kevin.Prince@elettra.trieste.it](mailto:Kevin.Prince@elettra.trieste.it).

Our goal is to have the manuscripts refereed by the conference date so please help us by adhering to deadlines. This will allow prompt publication of the proceedings in early 2002. Your cooperation is greatly appreciated.

## ( Selection of Next Conference Site )

The International Advisory Board will meet on Wednesday 25<sup>th</sup> to discuss general organizational issues and the site selection for VUV-XIV. Proposals for the latter are hereby solicited. They should be communicated before the conference in a letter of intent to:

### **Ingolf Lindau**

University of Lund - MAX Lab.  
Dept. of Synchrotron Radiation Research  
Professorsgatan, 3  
P.O.B. 118 - Lund  
e-mail: [Ingolf.Lindau@sljus.lu.se](mailto:Ingolf.Lindau@sljus.lu.se)

Each proposal will be given 15 minutes in the International Advisory Board meeting for presentation. The presentation should include site specification and capacity, local accommodations and expected costs, and any nearby scientific facilities that may be of interest.

Time	Sunday 22 <sup>nd</sup>	Monday 23 <sup>rd</sup>	Tuesday 24 <sup>th</sup>	Wednesday 25 <sup>th</sup>	Thursday 26 <sup>th</sup>	Friday 27 <sup>th</sup>
8:15-9:00		Registration				
9:00-10:30		Opening Session - Plenary Session	Parallel Sessions <ul style="list-style-type: none"> <li>• Interfaces</li> <li>• Coherence</li> <li>• Techniques &amp; Novel Sources I</li> </ul>	Plenary Session	Parallel Sessions <ul style="list-style-type: none"> <li>• Magnetic Systems &amp; Photon Polarization</li> <li>• Techniques II</li> <li>• Dynamics at Surfaces</li> </ul>	Plenary Session
10:30-11:00		Break	Break	Break	Break	
11:00-11:15		Poster Session 1	Poster Session 2	Poster Session 4	Poster Session 6	
11:15-11:45						Break
11:45-12:30						Closing Session
12:30-2:30		Lunch	Lunch	Lunch	Lunch	Lunch
2:30-4:00		Parallel Sessions <ul style="list-style-type: none"> <li>• Atomic and Molecular Research</li> <li>• High Resolution Spectroscopy</li> </ul>	Parallel Sessions <ul style="list-style-type: none"> <li>• Coherence</li> <li>• Techniques &amp; Novel Sources II</li> <li>• Biological Applications and Soft Matter</li> </ul>	Parallel Sessions <ul style="list-style-type: none"> <li>• Microscopy and Spectromicroscopy</li> <li>• Magnetic Systems &amp; Photon Polarization</li> <li>• Techniques I</li> </ul>	Parallel Sessions <ul style="list-style-type: none"> <li>• Related Theory</li> <li>• Low Dimensional and Correlated Systems I</li> </ul>	Tour of Elettra
4:00-4:30		Break	Break	Break	Break	
4:30-5:00		Parallel Sessions <ul style="list-style-type: none"> <li>• Inelastic Scattering</li> <li>• Advanced Material Research</li> </ul>	Poster Session 3	Poster Session 5	Parallel Sessions <ul style="list-style-type: none"> <li>• Low Dimensional and Correlated Systems II</li> <li>• Electronic Structure</li> </ul>	
5:00-5:30	5:00-8:00 Pre-registration					
5:30-6:00					Best posters presentation	
6:00-6:30						
Evening	7:00-8:00 Welcome Cocktail			Banquet		



## Invited Oral Presentations

### Plenary Sessions

Name	Title
E. Bauer	Spectromicroscopy with the SPELEEM
O. Björneholm	Resonant Core Level Studies of Molecules and Clusters: Electronic Structure and Femtosecond Dynamics
C.A. Larabell	Imaging Cells Using Soft X-Ray Microscopy
T. Takahashi	Progress of High-Resolution Photoemission Spectroscopy in Strongly Correlated Electron Systems
M.A. Van Hove	Advances in the Theory of Photoelectron Diffraction and Holography
R. Wiesendanger	Spin-Resolved Spectro-Microscopy at the Atomic Level

### Parallel Sessions

Name	Title
P. Aebi	Angle-Scanned Photoemission on Switchable Mirrors
J.N. Andersen	Simple Metals <-> Simple Core Levels ?
M.C. Asensio	Fermi Surface Topology and Angle-Resolved Photoemission Results of Bi2212 Single Crystals
L. Avaldi	Spectroscopy and Dynamics in the Photoionization of Neon
S. Baroni	The Interaction of Ethylene with Perfect and Defective Ag(001) Surfaces
S.P. Cramer	X-Ray Spectroscopy of Metals in Enzymes – Soft or Hard?
A. Damascelli	Fermi Surface of $\text{Sr}_2\text{RuO}_4$ by ARPES: A Longstanding Controversy
E. Di Fabrizio	Novel Zone Plate Doublet for Differential Interference Contrast Microscopy Fabricated by Means of Electron Beam Lithography

Name	Title
H. Ebert	Theoretical Description of the Magneto-Optical Properties of Arbitrary Layered Systems
C.S. Fadley	Core-Level Spectroscopy, Diffraction, and Holography: Recent Developments and Future Prospects
J. Feldhaus	Single Pass Free Electron Lasers for Short Wavelengths: from Proof-of-Principles Experiments to a User Facility
P. Feulner	Core Excitation Induced Bond Breaking of Chemisorbed Molecules Probed by Emission of Ions, Neutrals and Electrons
M.V. Ganduglia-Pirovano	Theoretical Predictions of Oxygen Induced Surface Core-Level Shifts: A Probe of the Local Overlayer Structure
J. García Ruiz	Lack of Atomic Charge Localization in Transition Metal Mixed Valence Oxides
E. Gluskin	SASE FEL - Toward VUV and X-Ray
T. Greber	K-Resolved One and Two Photon Photoemission Around the Fermi Level
S. Günther	Transport of K on Rh(110) during the Catalytic Reaction of $H_2 + O_2$
U. Hergenhahn	Continuum Structures in Molecular Photoionization
U. Hillebrecht	Surface Antiferromagnetic Order of Transition Metal Oxides Studied by Photoemission Microscopy
A.P. Hitchcock	Soft X-Ray Microscopy of Soft Matter - Hard Information from Two Softs
K. Horn	Valence Band Structure of Quasicrystals Studied by Photoemission: Dispersing States and Quasi-Brillouin Zones
D.J. Huang	Correlation Effects on the Electronic Structure of Half-Metallic Transition Metal Oxide Thin Films
R. Imbihl	Electrocatalysis at Pt/YSZ Interfaces



Name	Title
C. Jacobsen	Spectromicroscopy of Biological and Environmental Systems at Stony Brook
P.D. Johnson	Photoemission Studies of Self-Energy Effects in High $T_c$ Superconductors and Other Materials
R. Klouser	Zone-Plate-Based Scanning Photoemission Microscopy at SRRC: Performance and Applications
M. Krisch	X-Ray Raman Scattering from Low Z Materials
G.N. Kulipanov	Diffraction Limited Fourth Generation VUV and X-Ray Source Based on an Accelerator - Recuperator
G. Le Lay	Dynamical Effects at the Order-Disorder Reversible Phase Transitions of Sn and Pb on the Ge and Si (111) Surfaces
B.R. Lewis	Comparative Very-High-Resolution VUV Spectroscopy: Laser Spectroscopy of $O_2$
I. Lindau	Scientific Opportunities with the Proposed LCLS at Stanford
M. Marsi	UV/VUV Free Electron Lasers and Applications in Materials Science
M. Murnane	Control of Atoms and Molecules Using Shaped Pulses
F.P. Netzer	High-Resolution Core Level Spectroscopy of "Inverse Catalyst" Surfaces: Probing the Metal-Oxide Interface
F. Nolting	Exploring the Ferromagnetic - Antiferromagnetic Interface Using PEEM
G. Paolucci	Surface Kinetics by Fast Core-Level Photoemission
P. Perfetti	Observation of Low Dimensional Behaviour of Electronic Structures in One-Dimensional In-Rows of Clean $InAs(001)4 \times 2 - c(8 \times 2)$ Surface

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( Invited Oral Presentations )

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Name	Title
Z.Q. Qiu	Quantum Well States and Interlayer Coupling in Magnetic Nanostructures
J.E. Rubensson	Fluorescence from Doubly Excited States of Helium
M. Sacchi	Magnetic Coupling in Thin Layers and Superlattices Investigated by Resonant Scattering of Polarized Soft X-Rays
T. Schmidt	Nanospectroscopy Using Aberration Correction: the SMART Project
G. Schneider	Computed Tomography of Cryogenic Cells
G. Schütz	Magnetic X-Ray Absorption and Scattering
S. Suga	Recent Development in Soft X-Ray Spectroscopy of Correlated Materials: High Resolution Absorption and Bulk Sensitive Photoemission
J. Susini	Recent Achievements in Multi-KeV X-Ray Microscopy
L.J. Terminello	Nanocluster Properties Characterized Using Soft X-Ray Spectroscopies
K. Ueda	Nuclear Motion, Symmetry Breaking, and Dissociation Dynamics of Core-Excited Polyatomic Molecules
X.J. Zhou	Charge Ordering and Electronic Structure of $(\text{La}_{2-x-y}\text{Sr}_x\text{Nd}_y)\text{CuO}_4$ Stripe Phase and $(\text{La}_{2-x}\text{Sr}_x)\text{CuO}_4$ High- $T_c$ Superconductors



### ▶ Messages

During the conference, messages for participants can be left between 8.30 a.m. and 5.30 p.m. by calling the Stazione Marittima at +39-040-304988. A message board will be set up near the conference registration area.

### ▶ Job Offers

A board dedicated to Job Offer advertising will be set up near the conference registration area, allowing participants to display job announcements from their home institutions. The maximum available size for each announcement is one sheet of A4 paper (8,5 x 11 inches).

### ▶ Industrial Exhibition

As it is customary, during VUV-XIII a continuous exhibition of vendors' products and services will be held. The VUV exhibition will be centrally placed within the Conference facilities to encourage contacts and good interaction.

Detailed information concerning the arrangements for the Exhibition are available by contacting the Industrial Exhibition Manager:

#### **Cristiana Fiandra**

*"the office"*

Via San Nicolo', 14

34121 - Trieste

e-mail: [vuv@theoffice.it](mailto:vuv@theoffice.it)

tel.: +39-040-368343

fax: +39-040-368808

### ▶ Audio Visual equipment

The technical equipment available for presentations is:

- overhead projector
- slide projector (please do not use paper framed slides)
- computer Power Point projector and PC (Office 2000)
- video projector (upon request)
- laser pointer

A terminal room will be available with Internet connection.



### Events

A welcome reception and a banquet are planned for VUV-XIII. The welcome reception will be offered to participants and accompanying persons at the Stazione Marittima on Sunday, July 22<sup>nd</sup>, from 7 p.m. to 8 p.m., in conjunction with registration. Participants and accompanying persons are invited to attend. Registration material will be available from 5 p.m. to 8 p.m.

The Wednesday evening banquet will be held at the new exclusive Yacht Club “Porto San Rocco” (<http://www.portosanrocco.it>), in the bay of picturesque Muggia Village. A Ferry will take the participants from the Conference site to the Restaurant. For registered participants, the banquet is included in the fee. Accompanying persons can purchase their Banquet ticket at the registration desk no later than Monday 23<sup>rd</sup>, 5 p.m.

### Tour of Elettra

A tour of Elettra is planned for the afternoon of Friday, July 27<sup>th</sup>. Participants and accompanying persons are required to sign up for the tour at the registration desk no later than Tuesday 24<sup>th</sup>, 5 p.m. The tour will be of interest for both conference participants and accompanying persons.

### What to do in Trieste

Historically and culturally an international city, Trieste offers visitors many interesting activities. Events which make it worth coming to Trieste are many: July is normally a time to relax, sunbathe and swim, enjoy a walk in Miramare Park, spend an evening at the Festival of Operetta or at one of the many open-air shows. Venice is just two hours by train from Trieste. Those inclined to explore may take a day trip to the Collio wine-producing regions. More details are available at the web site:

<http://www.triestetourism.it/inglese/index.htm>. At the secretariat desk you will find all information concerning the timetable for boat trips leaving from Piazza Unità to the Riviera of Barcola (Trieste beach).

Restaurants: you will find an exhaustive guide to Trieste restaurants in your conference folder.

Most shops are closed on Sundays and Mondays; opening hours: 9.00-12.30 a.m./4.00-7.30 p.m. A shopping mall is however open on Sundays.

Banks are open from Monday to Friday: 8.30 a.m.-1.20 p.m./2.30-3.30 p.m.



## ▶ **Accompanying Person Social Program**

An attractive accompanying person social program has also been organized, including tours and cultural activities.

### *Important notice:*

**Please note that a minimum of 25 participants is required for each activity. E-mail pre-registrations are welcome (vuv@theoffice.it). Payment (cash only) should be made directly at the Secretariat Desk upon your arrival, at least one day in advance.**

**No credit cards will be accepted for the payment of the accompanying person social program.**

## ▶ **Monday 23 July**

### **Visit of the Museo Revoltella**

(Museum of modern art, via Diaz 27) - **3:00 - 5:30 p.m.**

Meeting point: main entrance of the "Stazione Marittima"

Visit of the Museum's art collection which offers a selection of works by Triestine 19th and 20th century painters. An art expert will introduce the paintings housed in the beautiful building owned by baron P. Revoltella. The apartment with original furniture will also be visited.

The cost is ITL 30,000 per person and includes the entrance ticket and the guided tour.

## ▶ **Tuesday 24 July**

### **Tour of Trieste - 9:00 a.m.- 1:00 p.m.**

Meeting point: main entrance of the "Stazione Marittima"

A crossroads between the Central-European and the Mediterranean cultures, Trieste has always been a pole of attraction. Trieste's setting is particularly beautiful with the combination of the shining whiteness of its rocks, the blue sea and the green hills that surround it. Approaching the town along its wonderful coast road, Trieste appears perfectly inserted in the surrounding territory.

Its past history can still be seen in the Roman ruins on Capitol Hill, San Giusto Castle and the Roman Theatre.

Memories and images of the past can be seen in all streets, from the little alleys that wind through the ancient suburbs with their old houses and ruined walls to the wide central streets that cross the new part of the town with its elegant neo-classical buildings.

The part of the coast called Riviera di Barcola runs below the lighthouse. It is a splendid promenade by the sea where international regattas take place every year and a favourite swimming spot in the summer months. Miramare Castle stands out at the end of the Riviera; the Castle was built between 1856 and 1860 for Maximilian of Hapsburg.

The cost is ITL 60,000 per person and includes the entrance ticket to Miramare Castle Museum, coffee, bus transportation and the guided tour.

▶ **Wednesday 25 July**

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**Excursion to the surrounding countryside - 9:00 a.m.- 1:00 p.m.**

Meeting point: main entrance of the "Stazione Marittima"

Visit of the Carstic hills surrounding Trieste and the "Grotta Gigante", one of Europe's largest caves. The Grotta Gigante, in the area around Sgonico, is well known to experts and to the wide public. The Cave has such an enormous room (208 meters long, 65 meters wide and with a 108 meters high cupola) that it could host something as big as St. Peter's Cathedral.

The cost is ITL 50,000 per person and includes the entrance ticket to the Grotta Gigante, bus transportation and the guided tour.

▶ **Thursday 26 July**

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**Visit of Aquileia and Grado - 2.00 - 7:00 p.m.**

Meeting point: main entrance of the "Stazione Marittima"

Just 50 km away from Trieste, we find the charming old coastal town of Grado with its beautiful white sand shores. This is a bewitchingly fantastic world of land and water. The hub of life in Grado in every season is the busy harbour canal, embraced by the picturesque houses of the old town.

Near Grado, the ancient Roman town of Aquileia is worth a visit: the Basilica of early Christian origin and the archaeological remains as well as



the Roman Museum are fascinating historical landmarks. Actually the Byzantine Emperor Justinian described the town: “Aquileia, the greatest of all the towns in the West”, certainly thinking of the exceptional importance reached by the capital of “Venetia et Histria” on an economic, military and political scale at the height of its splendor.

The cost is ITL 70,000 per person and includes the entrance ticket to the archaeological museum, coffee, bus transportation and the guided tour.

### ▶ Friday 27 July

#### Visit of Elettra – 3:00-6:00 p.m.

Free of charge.

### ▶ Weather

The weather in Trieste in July is generally hot and sunny. The average daytime temperature is 25-35 degrees C, and evenings are quite warm too. Nonetheless, sometimes it may rain and participants are advised to bring a light raincoat or a sweater.

### ▶ Lunches

Lunches will be available at the Stazione Marittima Cafeteria where a self service restaurant will be open from 12.30 to 2.30 p.m. Vegetarian meals are also available. Prices may range from ITL 25,000 to ITL 40,000. Payment should be made directly to the Cafeteria. Furthermore you will find an exhaustive guide to Trieste restaurants in your conference folder.

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## Committees

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### Conference Chair

Massimo Altarelli (Sincrotrone Trieste, Italy)

### Organizing Chair

Giovanni Comelli (Trieste University, INFN, Italy)

### International Advisory Board Chair

Ingolf Lindau (MAX-lab, Lund University, Sweden)

### Program Advisory Committee Chair

Maya Kiskinova (Sincrotrone Trieste, Italy),

Giorgio Margaritondo (EPFL Lausanne, Switzerland)

### Organizing Committee

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