

به نام خدا



ICTP

سید محمد صادق موحد
دانشکده فیزیک - دانشگاه شهید بهشتی
گروه کیهان شناسی محاسباتی (GCC-SBU)
www.smovahed.ir

شرط خرد حفظ تجربه ها و به کار بستن آنهاست حضرت علی (ع)

فهرست ۱

بخش اول

- (۱) معرفی مرکز فیزیک نظری عبدالسلام
- (۲) تاریخچه مختصر در مورد ICTP

بخش دوم

- (۳) برنامه های علمی مرکز ICTP
- (۴) روشهای درخواست مسافرت به ICTP

بخش سوم

- (۵) توصیه هایی برای شرکت در برنامه های علمی

بخش چهارم

- (۶) تسهیلات مرکز ICTP

فهرست ۲

بخش پنجم

(۷) چگونه می توان به ICTP سفر کرد؟

بخش ششم

(۸) معرفی شهر تریست Trieste

(۹) مناطق دیدنی

(۱۰) زمان و مکان خرید سوغاتی

بخش هفتم

(۱۱) سفر به Venize

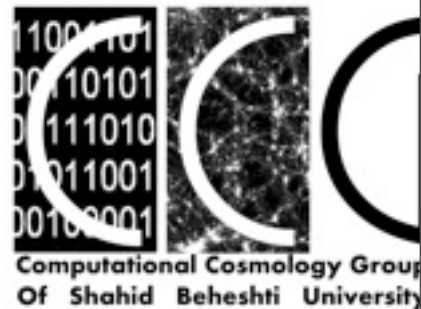
(۱۲) سفر به Felorance

Introduction to ICTP





The Abdus Salam
**International Centre
for Theoretical Physics**



ICTP 50th Anniversary

ICTP will be celebrating its 50th anniversary in 2014. We plan to mark this milestone in ICTP's life with a major international conference to be held during the period 6 to 8 October 2014.

In its almost 50 years of existence, ICTP has provided scientists from developing countries with countless opportunities to conduct research and to study the latest advances in physics and mathematics.

Mark your calendars now and please check this space frequently, as we will be adding conference details as they become available.



- For nearly 50 years, ICTP has been established.
- After residing for four years in downtown Trieste, ICTP moved to its permanent location near the Miramare Park in 1968.
- Director of ICTP:

- 1) Abdus salam: from 1964 (۱۳۴۳) till 1993 (۱۳۷۲)
- 2) from 1993 (۱۳۷۲) till 2003 (۱۳۸۲)
- 3) K. R. Sreenivasan: from 2003 (۱۳۸۲) till 2009 (۱۳۸۸)
- 4) F. Quevedo: from 2009 (۱۳۸۸) till now

It is supported by:

Italian Government, 86% of the ICTP's annual €20.8m

UNESCO (United Nations Educational, Scientific and Cultural Organization)

IAEA, (International Atomic Energy⁷Agency)



Fernando Quevedo - Director of ICTP since October 2009

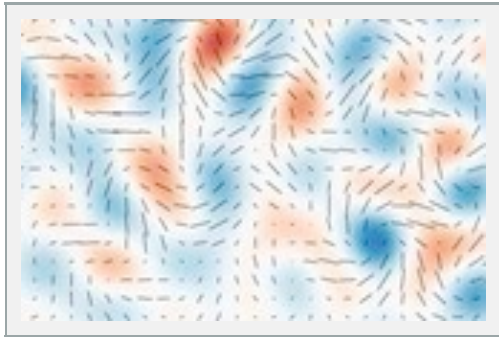
- He was born in 1956 in Costa Rica and obtained his early education in Guatemala. He obtained his Ph.D. from the University of Texas at Austin in 1986 under the supervision of Nobel Laureate [Steven Weinberg](#).
- Quevedo joined the Department of Applied Mathematics and Theoretical Physics at the University of Cambridge, UK, in 1998.



ICTP contains 6 sections

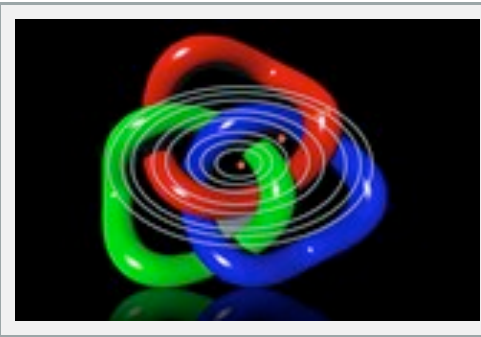


HECAP



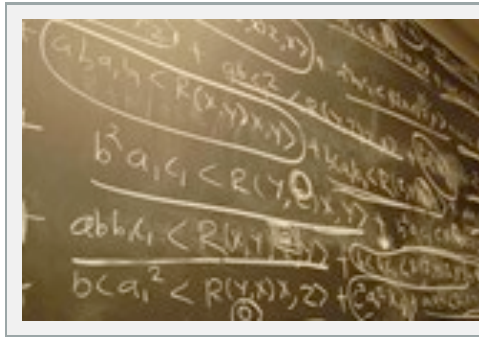
The High Energy, Cosmology and Astroparticle Physics (HECAP) section studies

CMSP



The Condensed Matter and Statistical Physics (CMSP) section investigates the physics

MATH



The Mathematics section is mainly oriented towards geometry and analysis.

ESP



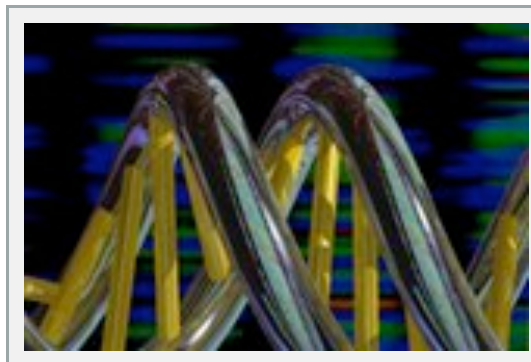
The Earth System Physics (ESP) section studies a wide spectrum of the Earth

AP



ICTP's diverse Applied Physics section encompasses areas of research that respond

New Areas



ICTP's three new research areas could

ICTP programs

Pre-PhD Programmes



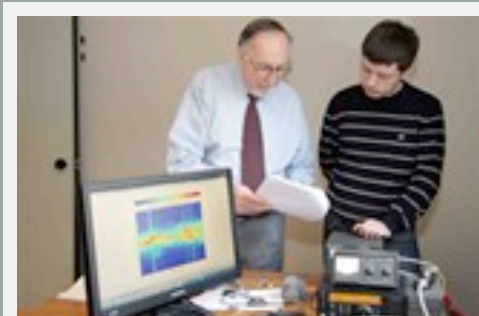
Postgraduate Diploma
Programme
ICTP/IAEA Sandwich
Training Education
Programme

Degree Programmes



Joint ICTP/SISSA PhD in
Physics or Mathematics
Joint PhD Fluid
Mechanics
Joint Laurea
Joint ICTP/Collegio
Carlo Alberto
Masters Complex
Systems
Masters in Medical
Physics

Career Development



Federation Scheme
Associates Scheme

Laboratory Opportunities



TRIL
ICTP/ELETTRA Users
ICTP Labs

Scientific Outreach



Office of External
Activities
ICTP in Brazil
ICTP in Africa
Science Dissemination
Unit
African Review of
Physics

ICTP in numbers



ICTP IN NUMBERS 2013



The Abdus Salam
International Centre
for Theoretical Physics
50th Anniversary 1964-2014



ICTP VISITORS 2013
5,977 VISITORS
FROM **139** NATIONS
77 TRAINING
ACTIVITIES AT
CAMPUS, **18** IN
DEVELOPING
COUNTRIES
11 DAYS AVERAGE
LENGTH OF VISIT FOR
CONFERENCE
PARTICIPANTS
65 DAYS AVERAGE
FOR RESEARCH
VISITORS

57 POSTDOCS
ON CAMPUS [**56%**
FROM DEVELOPING
COUNTRIES]

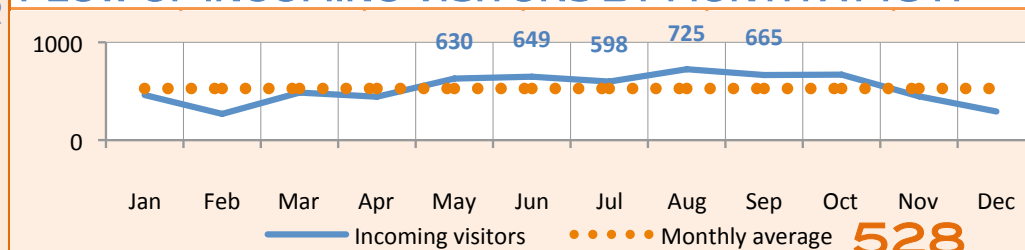
105 STUDENTS
ENROLLED IN PRE-
PHD EDUCATIONAL
PROGRAMMES

340 SCIENTISTS
ENGAGED IN
CAREER
DEVELOPMENT
PROGRAMMES

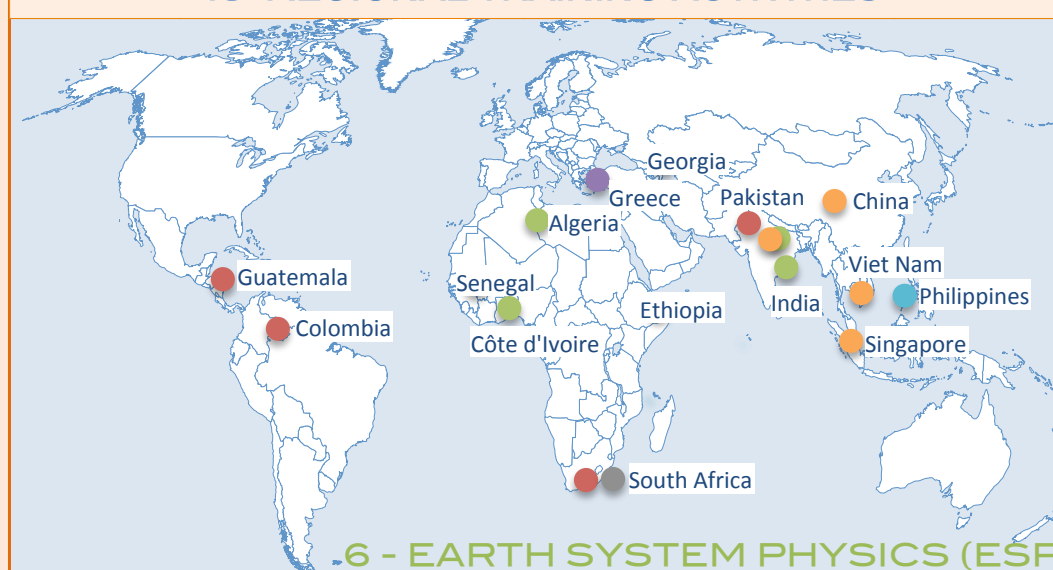
TOP 10 DEVELOPING COUNTRIES, BY REGION

Africa	N. of visitors	Asia	N. of visitors	Latin America	N. of visitors
Algeria	109	India	348	Brazil	131
Nigeria	86	Iran	150	Argentina	78
Egypt	66	China	137	Colombia	71
South Africa	63	Pakistan	85	Mexico	59
Cameroon	45	Viet Nam	75	Cuba	41
Ghana	43	Singapore	59	Venezuela	31
Morocco	39	Korea Rep.	54	Peru	26
Kenya	36	Turkey	45	Costa Rica	16
Sudan	35	Indonesia	24	Ecuador	15
Ethiopia	29	Georgia	22	Guatemala	14

FLOW OF INCOMING VISITORS BY MONTH AT ICTP



18 REGIONAL TRAINING ACTIVITIES



6 - EARTH SYSTEM PHYSICS (ESP)
4 - APPLIED PHYSICS (AP)
4 - CONDENSED MATTER PHYSICS (CMSP)
2 - MATHEMATICS (MATH)
1 - HIGH ENERGY PHYSICS (HECAP)
1 - PHYSICS AND DEVELOPMENT (PD)

DISTRIBUTION OF FEMALE VISITORS



1380 FEMALE
VISITORS [**23%**]

Asia	330
Africa	189
Latin America	141
Eastern Europe	138

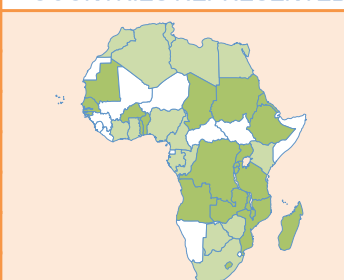
48% OF FEMALE VISITORS ARE
FROM DEVELOPING COUNTRIES

COURSE PARTICIPANTS BY RESEARCH AREA



1,500 MONTHS OF
TRAINING TO COURSE
PARTICIPANTS
LECTURED BY MORE
THAN **1,000** EXPERTS

COUNTRIES REPRESENTED



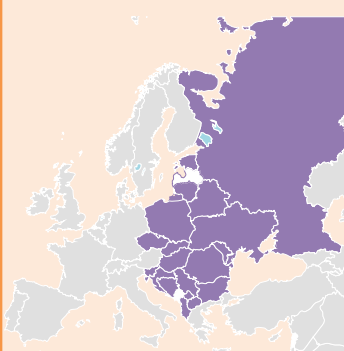
21 in LDCs in Africa
16 from rest of Africa



4 from LDCs in Asia
33 from rest of Asia



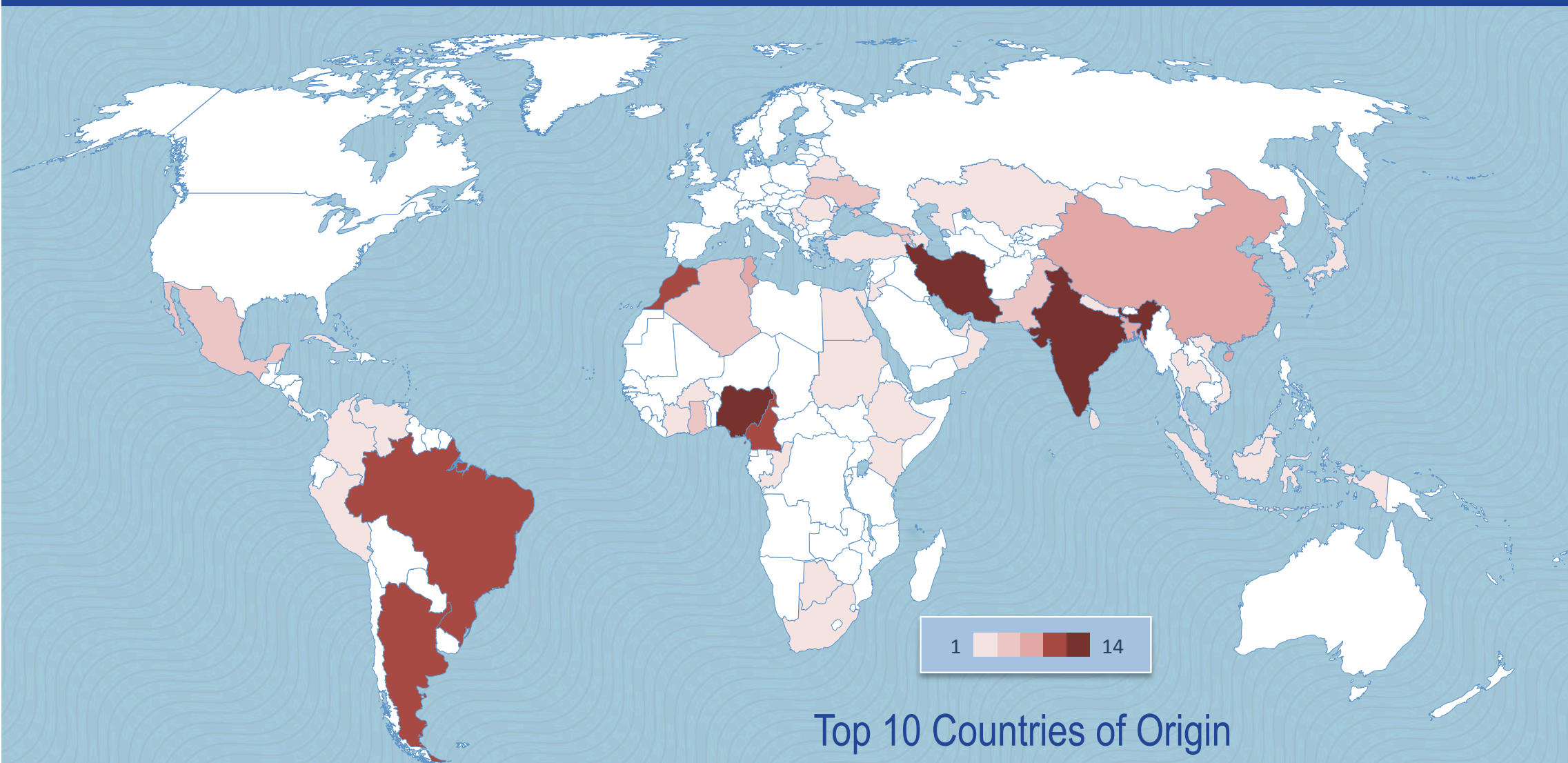
1 from LDCs Latin America
21 from rest of Latin America



18 from Eastern Europe

ICTP in numbers

Associates, Visits 2012



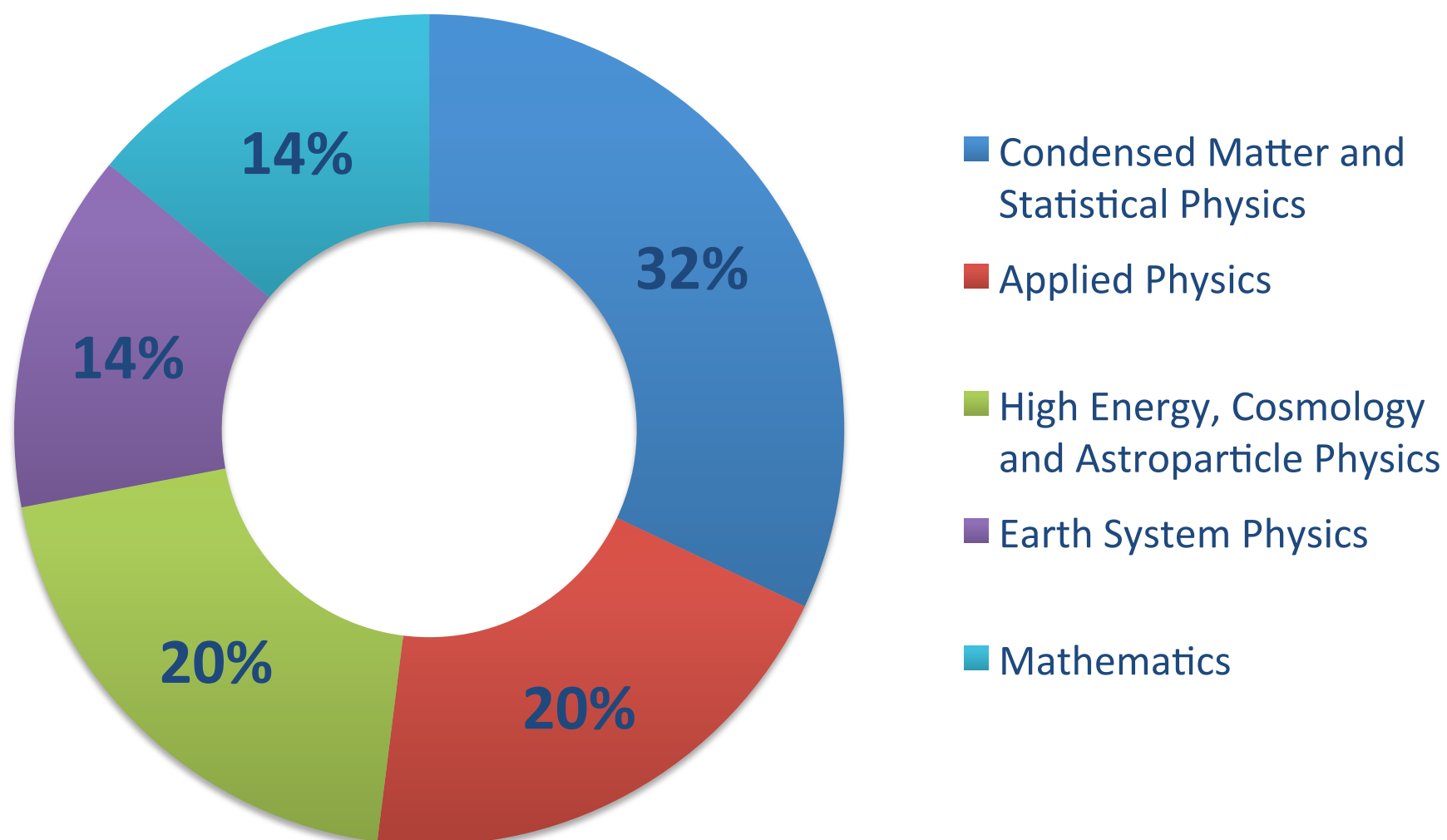
N. of Associates' visits: 162

Top 10 Countries of Origin

- | | |
|------------------|-------------------|
| 1. India (14) | 6. Cameroon (7) |
| 2. Iran(12) | 7. Morocco (6) |
| 3. Nigeria (10) | 8. Tunisia (5) |
| 4. Argentina (9) | 9. Bangladesh (5) |
| 5. Brazil (8) | 10. China (5) |

ICTP in numbers

What do scientists research at ICTP?



Top 10 ICTP Activities by Number of Participants in 2013



Training activity	Date	N. of Participants
21st International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY)	26-31/08/2013	365
16th International Workshop on Computational Physics and Materials Science: Total Energy and Force Methods	10-12/01/2013	248
Spring School on Superstring Theory and Related Topics	18-26/03/2013	184
Summer School on Particle Physics	10-21/06/2013	182
Workshop on New Light in Cosmology from the CMB	29/07-02/08/2013	127
School on Supersymmetry and Unification of Fundamental Interactions	20-23/08/2013	125
38th Conference of the Middle European Cooperation in Statistical Physics - MECO38	25-27/03/2013	120
School on New Light in Cosmology from the CMB	22-26/07/2013	117
Conference on Frontiers of Condensed Matter Physics	11-15/11/2013	113
Workshop on Ultracold Atoms and Gauge Theories	13-17/05/2013	107



Federation scheme



ASSOCIATE MEMBERS
Geographical distribution



Source: Associateship Office, 2010

EGYPT (6)

- Department of Mathematics and Theoretical Physics, the Theoretical Physics Group in Plasma Physics & Accelerator Department and the Nuclear Physics Department, Atomic Energy Establishment, Cairo
- British University of Egypt, Cairo
- Department of Scientific Research, Egyptian Meteorological Authority (EMA), Cairo
- Centre for Theoretical Physics, Zewail City of Science and Technology, Cairo
- Seismology Department, National Research Institute of Astronomy and Geophysics, Cairo
- Department of Mathematics, Faculty of Science, Cairo University at Giza, Giza

INDIA (5)

- Institute of Mathematical Sciences, Chennai
- Department of Physics, Faculty of Science, University of Lucknow, Lucknow
- Faculty of Biophotonics, Centre for Atomic and Molecular Physics, Manipal
- Department of Physics, University of Nagpur, Nagpur
- Department of Physics, University of Pune, Pune

IRAN (5)



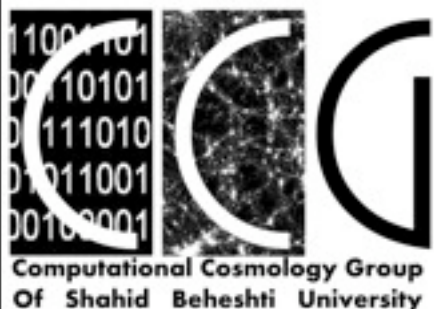
- Department of Mathematical Sciences, Isfahan University of Technology, Isfahan
- Department of Physics, Isfahan University of Technology, Isfahan
- Department of Physics, Shahid Beheshti University, Tehran
- Department of Physics, Faculty of Science, University of Tehran, Tehran
- Department of Mathematical Sciences, Sharif University of Technology, Tehran

KOREA D.P.R. (3)

- Kim Il Sung University Pyongyang Medical College & Maternity Hospital, Pyongyang
- Department of Ecology, Kim Il Sung University, Pyongyang
- Department of Environmental Control, Kim Chaek University of Technology, Pyongyang



Associate scheme



Name	Country	Research	Award
Hessami Pilehrood , Khodabakhsh (associate.html? siscode=PILEROKHOD001)	Iran	Mathematics Number theory; diophantine equations, diophantine approximation, transcendence of numbers, linear independence and irrationality, measures of irrationality.	Senior Associate until 31/12/2016
Hessami Pilehrood {Pogouliaeva}, Tatiana (associate.html? siscode=PILEROTATIO001)	Iran	Mathematics Number Theory (Diophantine approximations and transcendental number theory).	Junior Associate until 31/12/2014
Jafari, Seyed Akbar (associate.html? siscode=JAFARISAYA001)	Iran	Condensed Matter Graphene, Spin liquids, Strongly correlated electrons, Disordered solids.	Junior Associate until 31/12/2017
Memarzadeh Esfahani, Laleh (associate.html? siscode=MEMARZLALE001)	Iran	Condensed Matter Quantum Information, Quantum many body systems, Open Quantum Systems.	Junior Associate until 31/12/2017
Mohammad Rafiee, Farshid (associate.html? siscode=MOHAMMFARS003)	Iran	Biophysics Biological Physics	Junior Associate until 31/12/2019
Mohammadizadeh, Mahammad Reza (associate.html? siscode=MOHAMMMOHA001)	Iran	Condensed Matter Superconductivity, Preparation of HTSC, transport, electronic, structural and flux dynamics properties. Nano Science, Thin films, Nanoparticles, synthesis and analysis. First principle ab-initio simulations of solids, Electronic, structural and phonon frequencies properties.	Junior Associate until 31/12/2014
Moradi Koshkabadi , Alireza (associate.html? siscode=MORADIALIR001)	Iran	Optics	Junior Associate until 31/12/2017
Movahed, Seyed Mohammad Sadegh (associate.html? siscode=MOVAHESAYY001)	Iran	High Energy Data analysis in observational cosmology and Complex systems.	Junior Associate until

Categories for application

- 1) Participation in scientific activities
- 2) Associate member
- 3) Federation agreement
- 4) Visitor
- 5) Diploma course
- 6) PhD, Joint with SISSA
- 7) STEP

Recommendations for participant

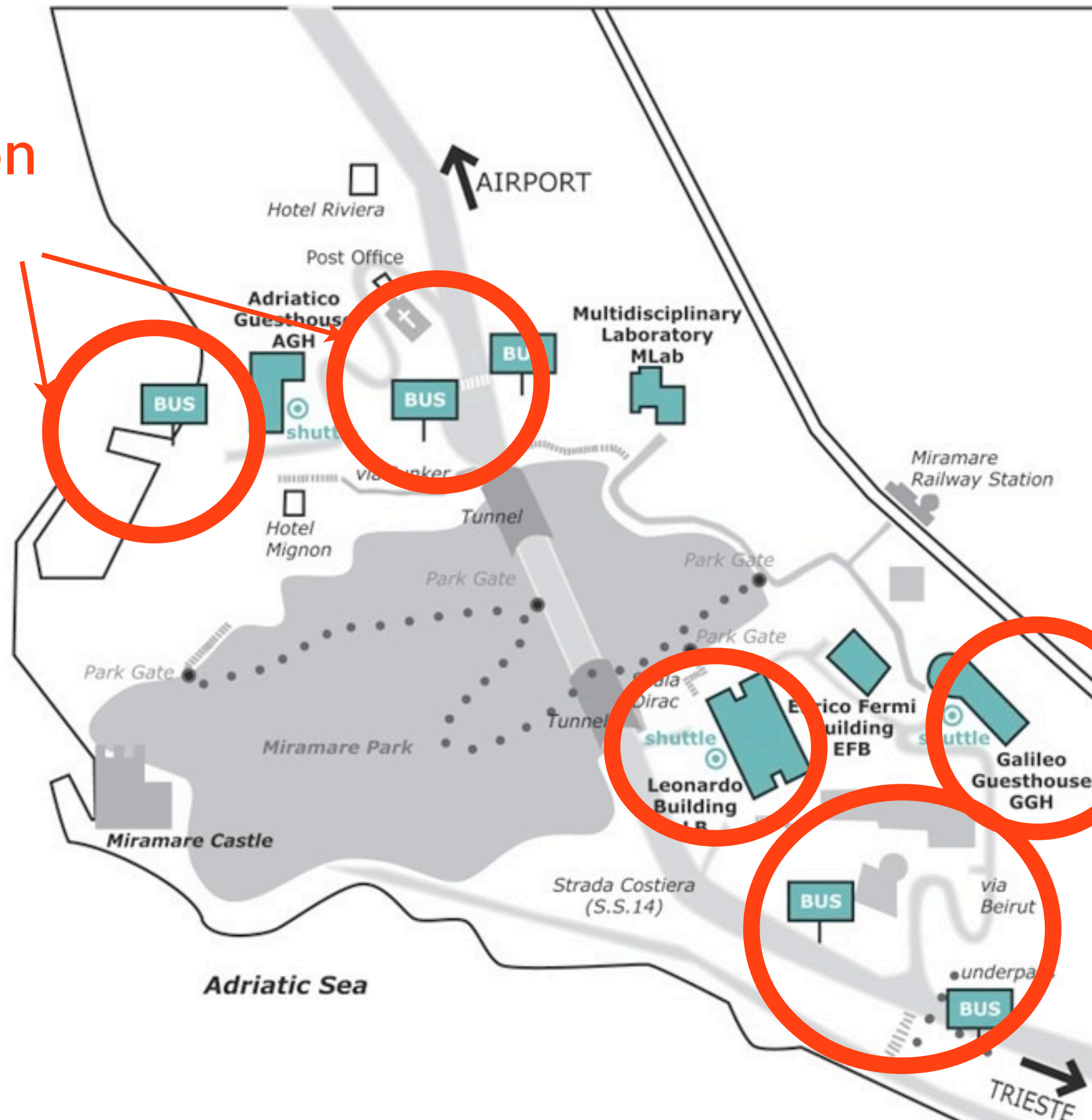


- 1) Check the time table of lectures.
- 2) Attending in whole activity.
- 3) Ask questions.
- 4) Take part in informal meeting (Lunch, coffee break, Dinner),
Take care about RAMADAN for those who are fasting.
- 5) Make appointment with other scientists (ICTP, SISSA, ...).
- 6) Daily check your mailing box.
- 7) Do the clearance one day before departure.
- 8) End of stay report (for visitors).
- 9) Take some necessary and personal usages in bag-back.
- 10) Bus and train tickets should be validate. 10-ticket is recommended. Validation of bus ticket is for 60 min (180 min festive).
- 11) Put all documents in bag-back.

ICTP campus



Bus station
No. 6



Guest
House

AGH



From airport to Trieste

Main building



EFB



GGH





Facilities by ICTP

- 1) Guest houses (GGH and AGU)
- 2) Mari Curie Library (first floor of main building)
- 3) Enrico Fermi building (Financial, visa, housing, travel agency)
- 4) Restaurants (main building and AGH)
- 5) Some lecture rooms
- 6) Computer rooms
- 7) Health insurance
- 8) <http://www.ictp.tv/>. Lecture notes and Tutorials.
- 9) Luggage deposit place
- 10) Meditation room in GGH. JOOMAH pray. (lower level of main building has a place for pray)
- 11) Laundry and coffee bar.
- 12) Book donation for associate members
- 13) Email account + wireless password
- 14) Post office: free note-book and 3 Kg free of charge for regular mail (Books and papers).
- 15) Info-point: Bus ticket, useful information, Tours and so on.



Upon arrival

- 1) Reception at guest house
- 2) Fill in permission of stay form
- 3) Get the meal coupon
- 4) Don't forget to leave Key

- **Climate:** Trieste is located in northeastern Italy, on the Adriatic sea. In all seasons, it is advisable to have an umbrella, waterproof shoes and sweater. In winter, a coat, gloves, hat and scarf are necessary. In summer, a bathing costume is useful.
- **Time Zone:** Trieste is in the Central European Time zone, which is 1 hour ahead of Greenwich Mean Time. From end March to end October, Italy (and the rest of Central Europe) is on Daylight Saving Time, which makes it 2 hours ahead of GMT.
- **Currency:** The Euro is the official currency in Italy. In Italy, cash payments are the norm. However, large shops, restaurants and travel agencies accept major credit cards, Travel and Euro-Cheques. A branch of UniCredit Banca is situated on campus in the Enrico Fermi Building.

Necessary documents for visa application



- 1) Valid passport + Copy of first 10 pages+ copy of previous Schengen visa
- 2) 3X4 photo (2)
- 3) Completed Form
- 4) Invitation letter and other attachments
- 5) Introduction letter
- 6) CV
- 7) The last certificate

Type of Visa and Permit of stay

- 1) Multiple
- 2) Single

Declaration/Permit of Stay

Additional requirements for your stay in Italy

When at ICTP all non-EU visitors need to formalize their stay in Italy within a maximum of 8 days from the date of entry into the country, unless the following two conditions coexist:

- the visit is for less than 9 days and
- the passport at the port of entry was stamped by the Italian Border Police

Galileo guest house



Adriatico guest house



1) Airport Transit:

<http://www.aeroporto.fvg.it/en/home/index.htm>

- From airport to ICTP by bus
- From airport to ICTP by taxi:

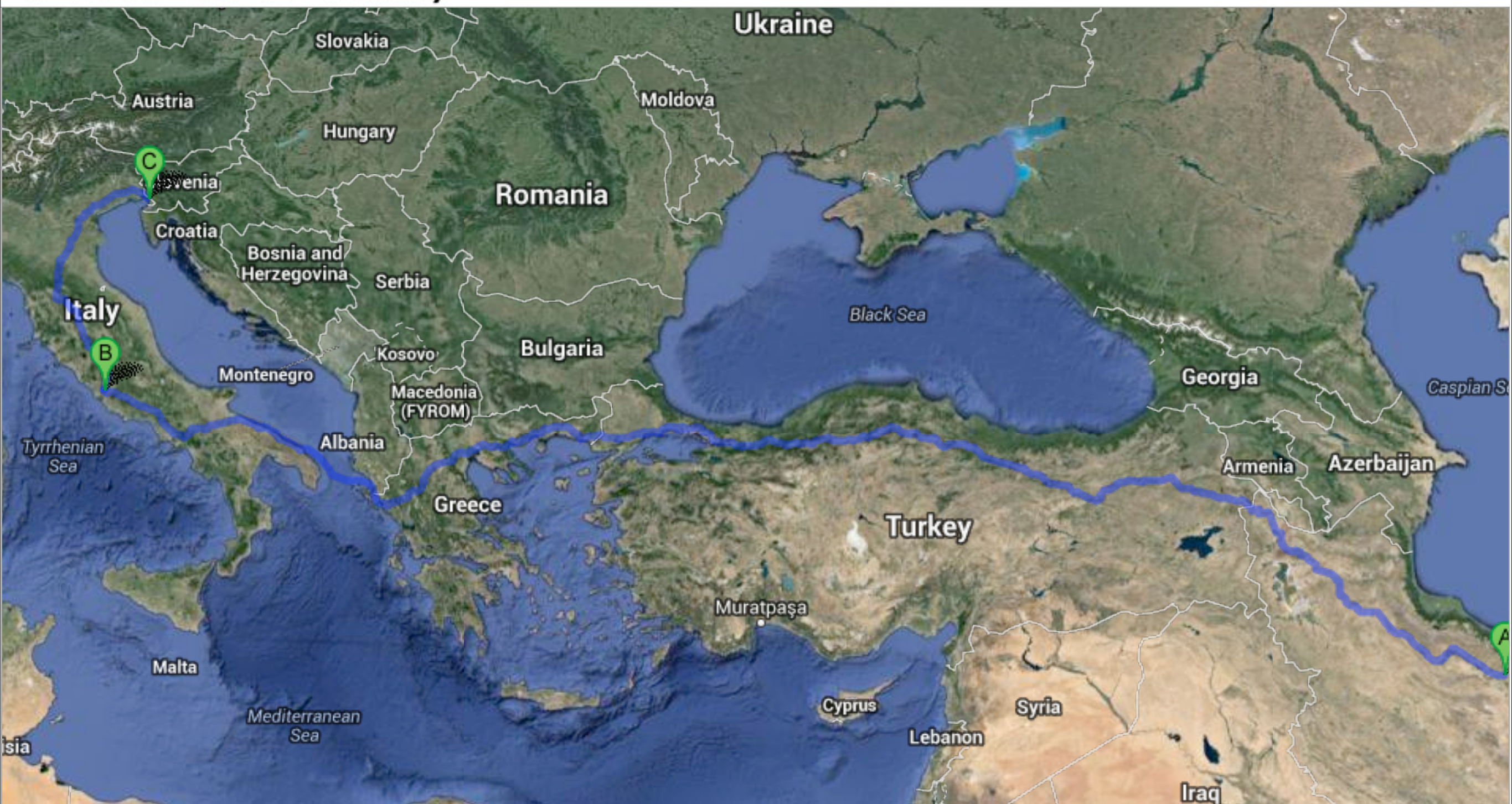
2) From Venice Marco Polo airport:

Venice Marco Polo airport

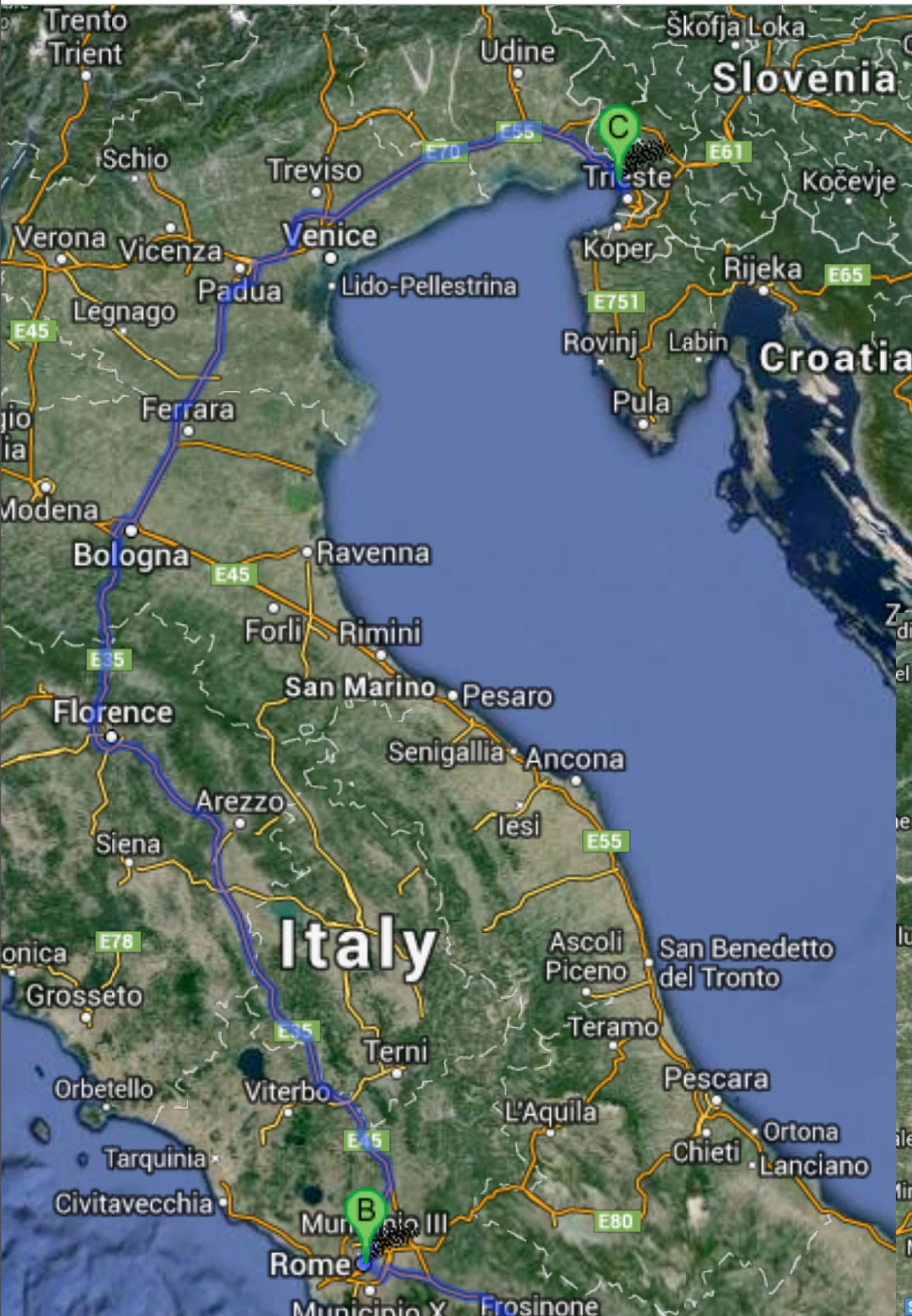
The best way is train: <http://www.trenitalia.com/>

From Tehran to ICTP

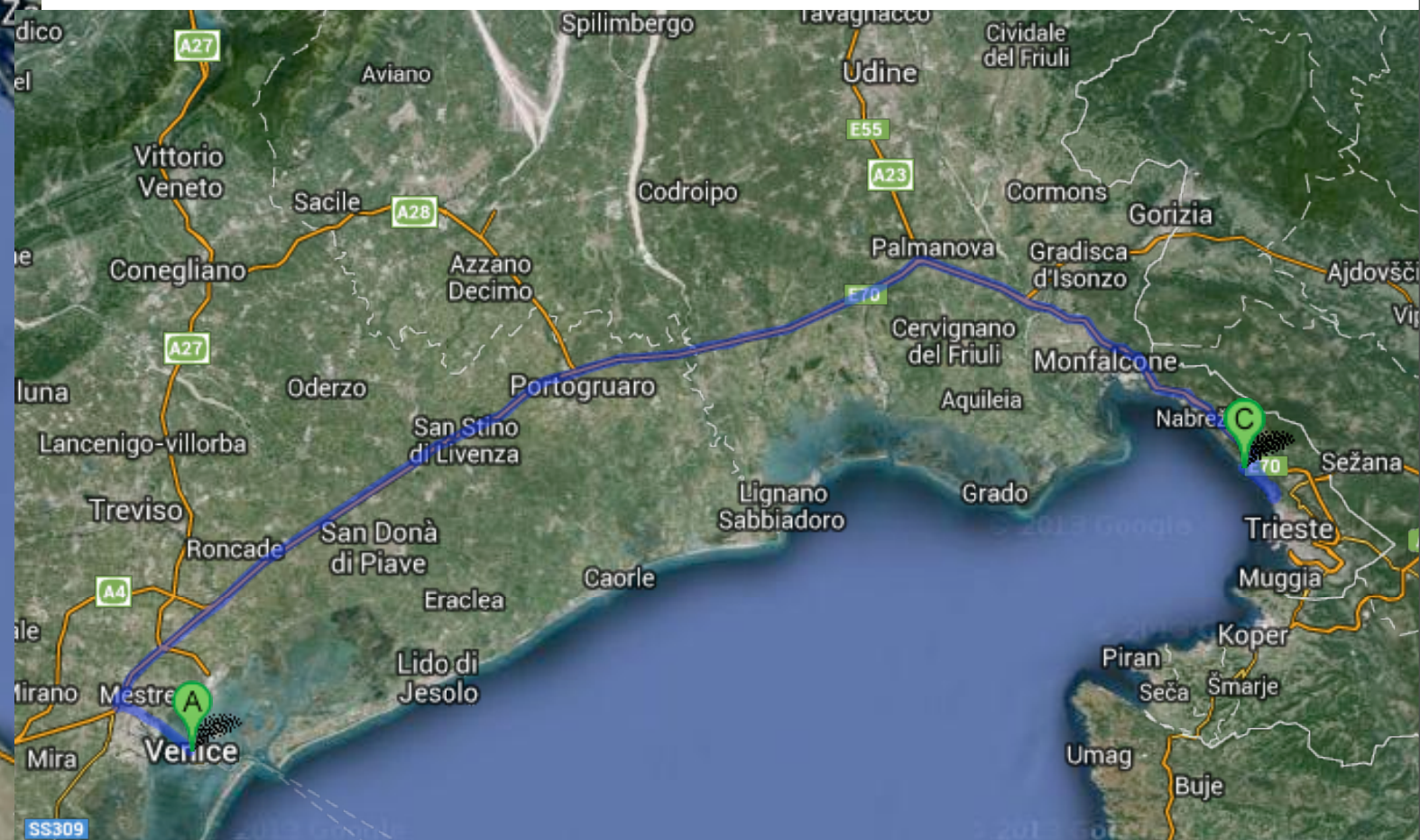
Duration: 5h 25m



Rome to ICTP, Duration: 1h 15m



Venice to ICTP. Duration ~2h by train



Ticket		Passes	
<input checked="" type="radio"/> Single	<input type="radio"/> Return		
From			
To			
Depart	21-06-2011	Hour	13
Return	21-06-2011	Hour	13
Adults	(1)	Children	(0)
Find best price		<input type="checkbox"/>	
Manage your ticket		SEARCH	

CARNET 10 JOURNEYS



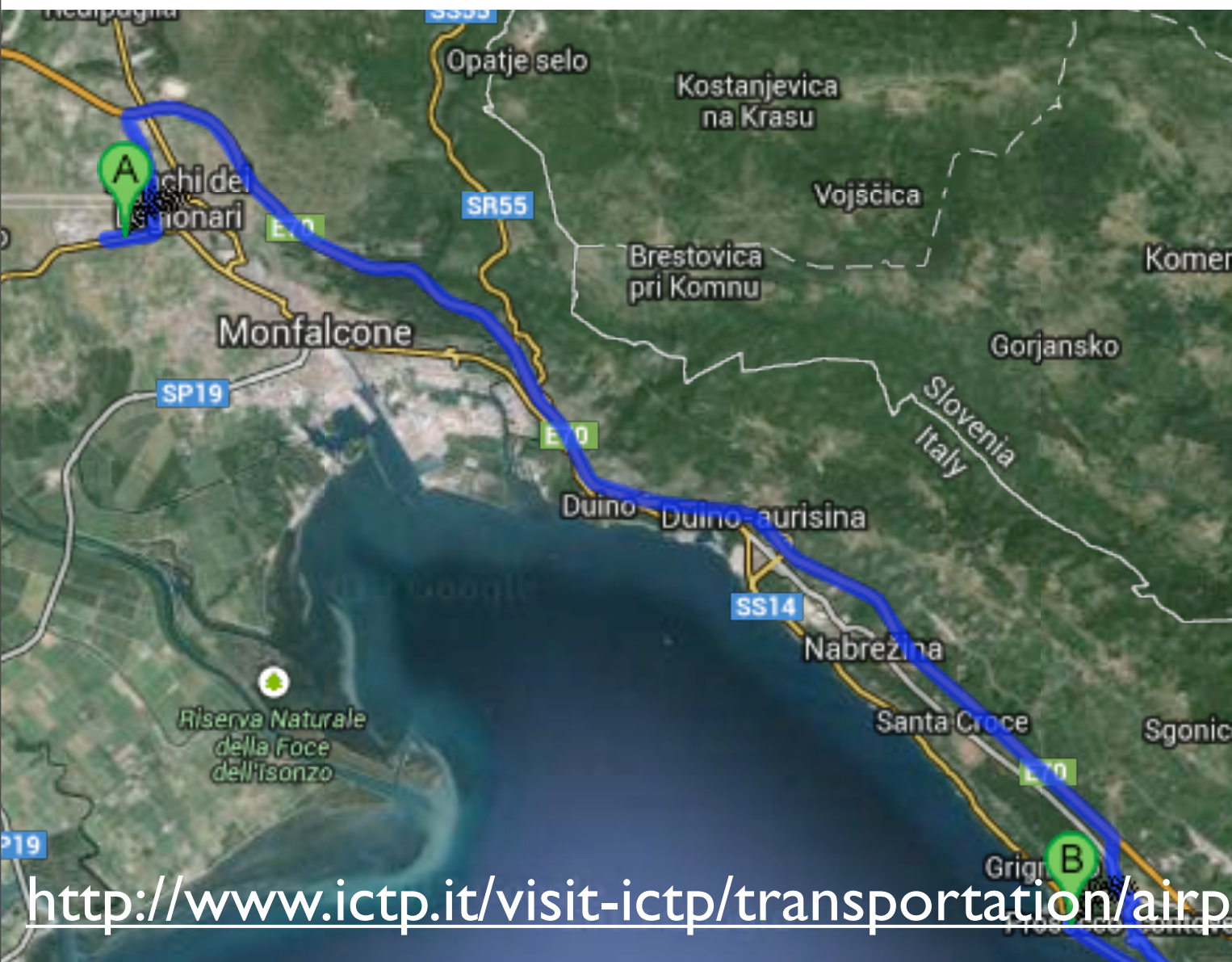
Get 10 tickets and pay just 8

To purchase ticket you should refer to main train station

From airport to ICTP

40 Km, It takes 40 min long.

Ticket can be found beside the exit using vending machine and should be validated upon boarding, Airport-Grignano (Not Trieste) (3.25 euro)



<http://www.ictp.it/visit-ictp/transportation/airport-transit.aspx>

From airport to ICTP

Grignano



From airport to ICTP

Grignano



From airport to ICTP

This time table can be found at info point



✈ E51 · AEROPORTO FVG - TRIESTE 🚌

numero corsa	85	9	87	93	15	17	19	21	23	25	27	29	
frequenza corsa	f	f	f	f	f	f	f	f	f	f	f	f	
01629 AEROPORTO FVG	5.55	6.35	7.05	7.35	8.05	8.35	9.05	9.35	10.05	10.35	11.05	11.35	1
12029 MONFALCONE V. Rosselli, 15/17	6.06	6.46	7.16	7.46	8.16	8.46	9.16	9.46	10.16	10.46	11.16	11.46	1
20106 DUINO SP2 (Centro)	6.24	7.02	7.27	8.02	8.32	8.57	9.27	10.02	10.27	10.57	11.32	12.02	1
20110 SISTIANA, 43/C (Centro)	6.29	7.07	7.32	8.07	8.37	9.02	9.32	10.07	10.32	11.02	11.37	12.07	1
20605 GRIGNANO/MIRAMARE SS14	6.40	7.18	7.43	8.18	8.48	9.13	9.43	10.18	10.43	11.13	11.48	12.18	1
20608 TRIESTE P.zza Libertà (Autostaz.)	6.53	7.31	7.56	8.31	9.01	9.26	9.56	10.31	10.56	11.26	12.01	12.31	1

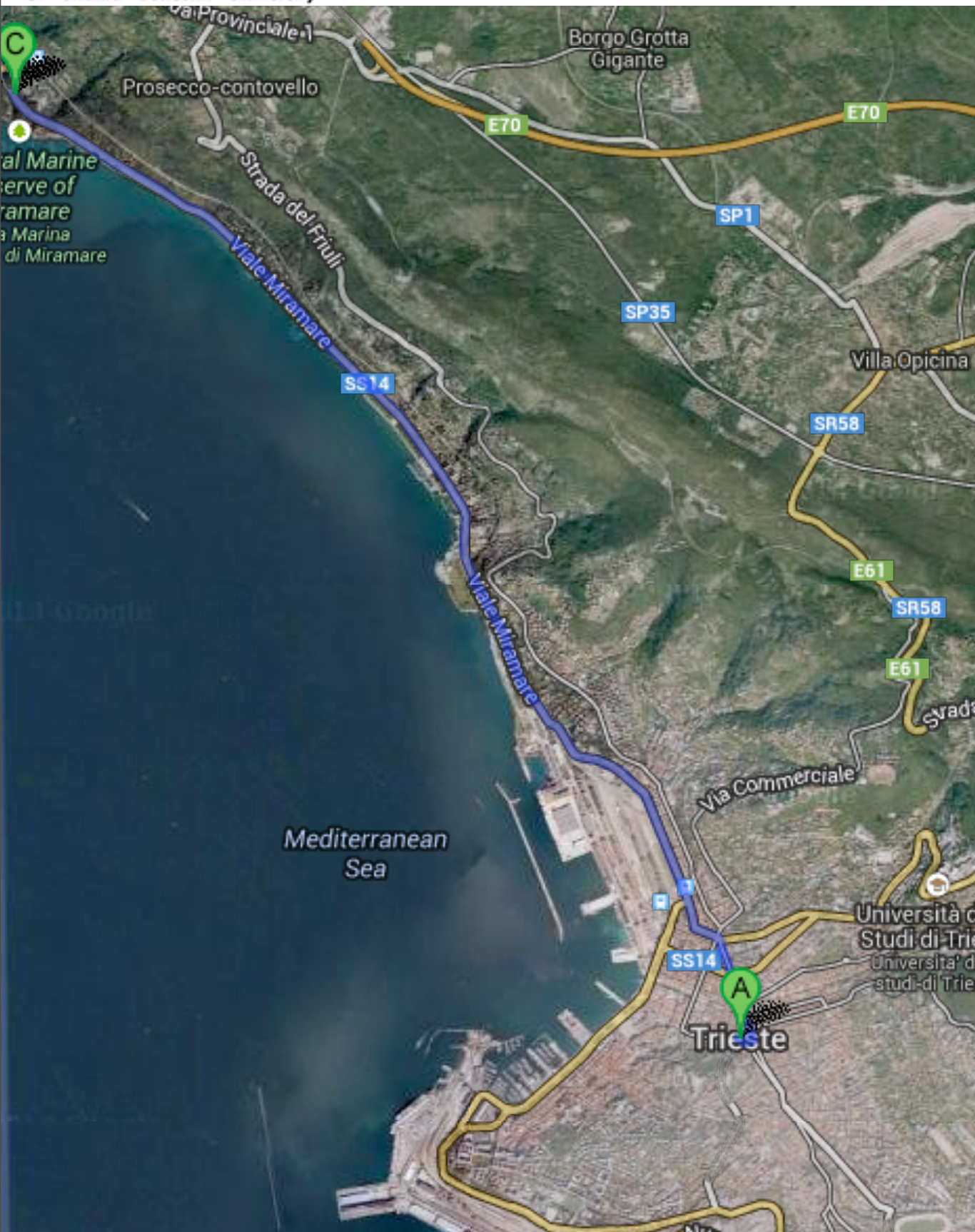
numero corsa	43	45	47	49	113	51	387	53	127	55	59	61	
frequenza corsa	f	f	f	l-v	sab	l-v	sab	l-v	sab	f	f	f	
01629 AEROPORTO FVG	15.05	15.35	16.05	16.35	16.35	17.05	17.05	17.35	17.35	18.05	18.35	19.05	1
12029 MONFALCONE V. Rosselli, 15/17	15.16	15.46	16.16	16.46	16.46	17.16	17.16	17.46	17.46	18.16	18.46	19.16	1
20106 DUINO SP2 (Centro)	15.27	16.02	16.27	17.16	17.02	17.29	17.27	17.59	17.57	18.32	18.57	19.32	2
20110 SISTIANA, 43/C (Centro)	15.32	16.07	16.32	17.21	17.07	17.34	17.32	18.04	18.02	18.37	19.02	19.37	2
20605 GRIGNANO/MIRAMARE SS14	15.43	16.18	16.43	17.32	17.18	17.45	17.43	18.15	18.13	18.48	19.13	19.48	2
20608 TRIESTE P.zza Libertà (Autostaz.)	15.56	16.31	16.56	17.45	17.31	17.58	17.56	18.28	18.26	19.01	19.26	20.01	2

numero corsa	97	157	155	107	109	111	39	163	103	129	179	121	
frequenza corsa	fes	fes	fes	fes	fes	fes	fes	fes	fes	fes	fes	fes	
01629 AEROPORTO FVG	6.00	7.25	9.10	9.55	12.05	13.05	14.15	16.05	17.35	19.45	21.05	22.50	2
12029 MONFALCONE V. Rosselli, 15/17	6.11	7.36	9.21	10.06	12.16	13.16	14.26	16.16	17.46	19.56	21.16	23.01	2
20106 DUINO SP2 (Centro)	6.24	7.47	9.37	10.22	12.32	13.27	14.44	16.32	17.57	20.07	21.27	23.14	2
20110 SISTIANA, 43/C (Centro)	6.29	7.52	9.42	10.27	12.37	13.32	14.49	16.37	18.02	20.12	21.32	23.19	2
20605 GRIGNANO/MIRAMARE SS14	6.40	8.03	9.53	10.38	12.48	13.43	15.00	16.48	18.13	20.23	21.43	23.30	(

From ICTP to downtown



ICTP to Trieste



Bus No. 6



From Grignano to Trieste. Adriatico guest house



Bus No. E5 I
for out city

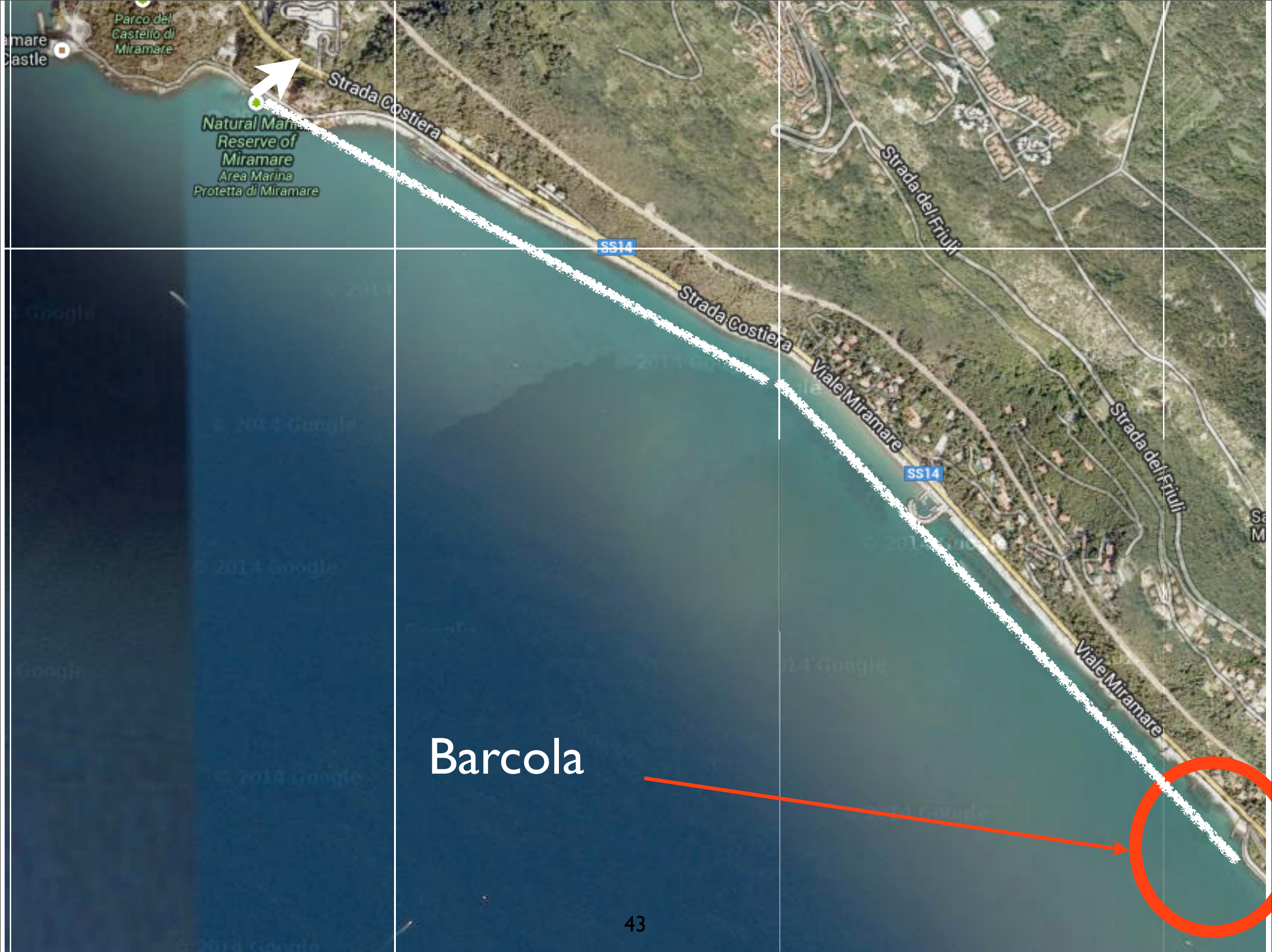
Bus No. 6
not 36

Bus station, No. 6



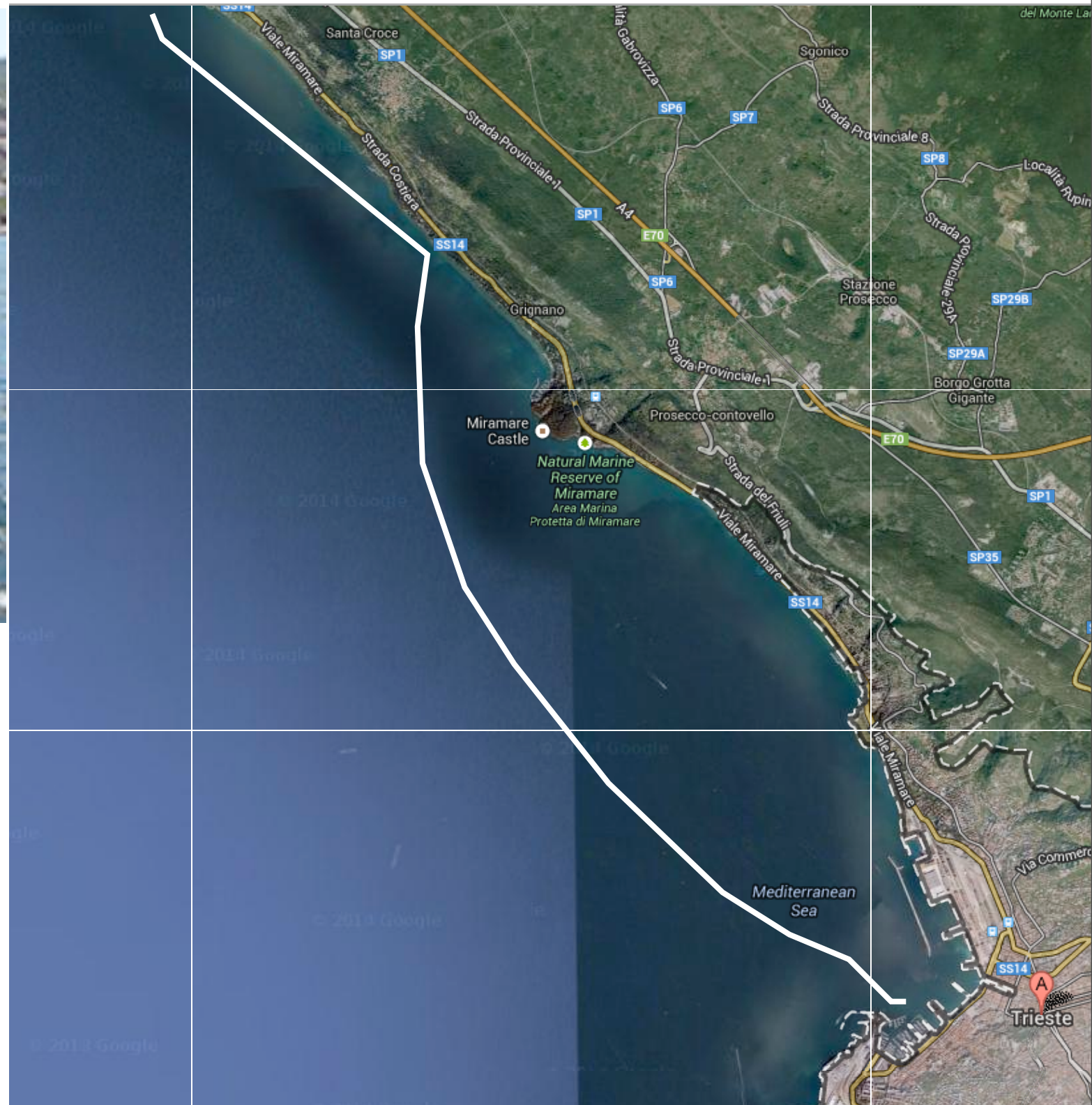


Bus station, No. 36



Barcola

From Grignano to Trieste by Boat



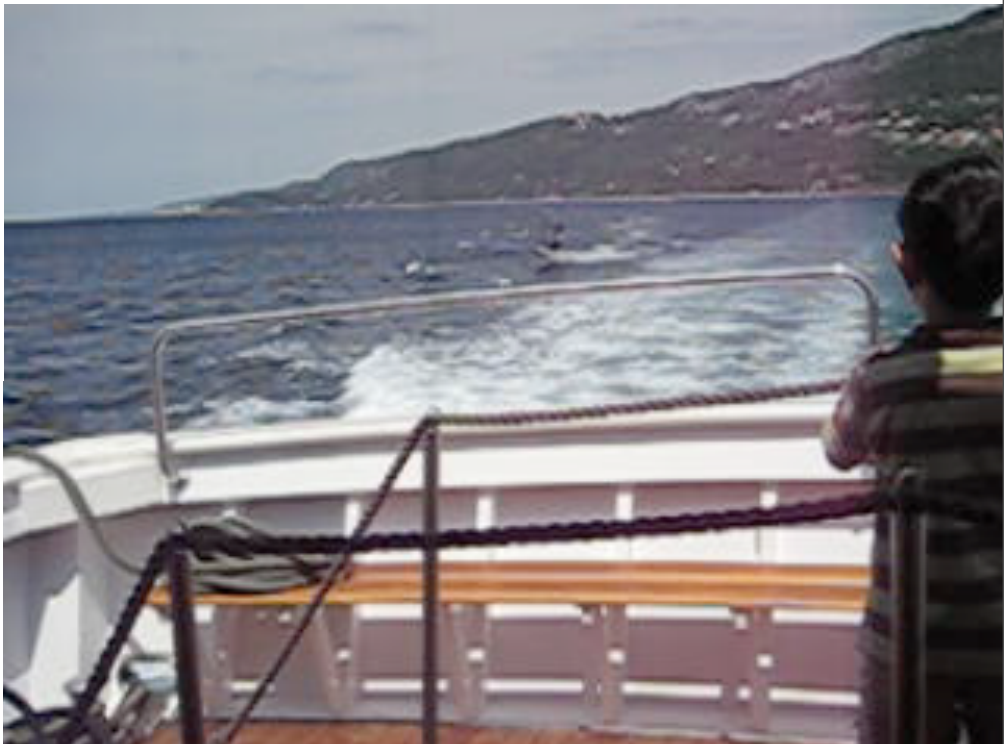


<http://www.triestetrasporti.it/index.php?trieste-barcola-grignano-sistiana&highlight=grignano%20trieste>

in vigore dal 1 giugno al 7 settembre 2014

partenza TRIESTE	8.00	11.00	14.30	17.30
arrivo BARCOLA	8.15	11.15	14.45	17.45
partenza BARCOLA	8.20	11.20	14.50	17.50
arrivo GRIGNANO	8.40	11.40	15.10	18.10
partenza GRIGNANO	8.45	11.45	15.15	18.15
arrivo SISTIANA	9.20	12.20	15.50	18.50
partenza SISTIANA	9.25	12.25	15.55	18.55
arrivo GRIGNANO	10.00	13.00	16.30	19.30
partenza GRIGNANO	10.05	13.05	16.35	19.35
arrivo BARCOLA	10.25	13.25	16.55	19.55
partenza BARCOLA	10.30	13.30	17.00	20.00
arrivo TRIESTE	10.45	13.45	17.15	20.15

	Trieste Barcola	Trieste Grignano	Trieste Sistiana	Barcola Grignano	Barcola Sistiana	Grignano Sistiana
Corsa Singola	€ 2,50	€ 4,20	€ 6,70	€ 1,70	€ 4,20	€ 1,70
Abbonamento Nominativo 10 corse	€ 12,60	€ 15,05	€ 29,30	€ 12,60	€ 15,05	€ 12,60
Abbonamento Nominativo 50 corse	€ 32,20	€ 36,85	€ 46,00	€ 32,20	€ 36,85	€ 32,20



Bus station for Urban and Rural and train station



Most famous shopping center

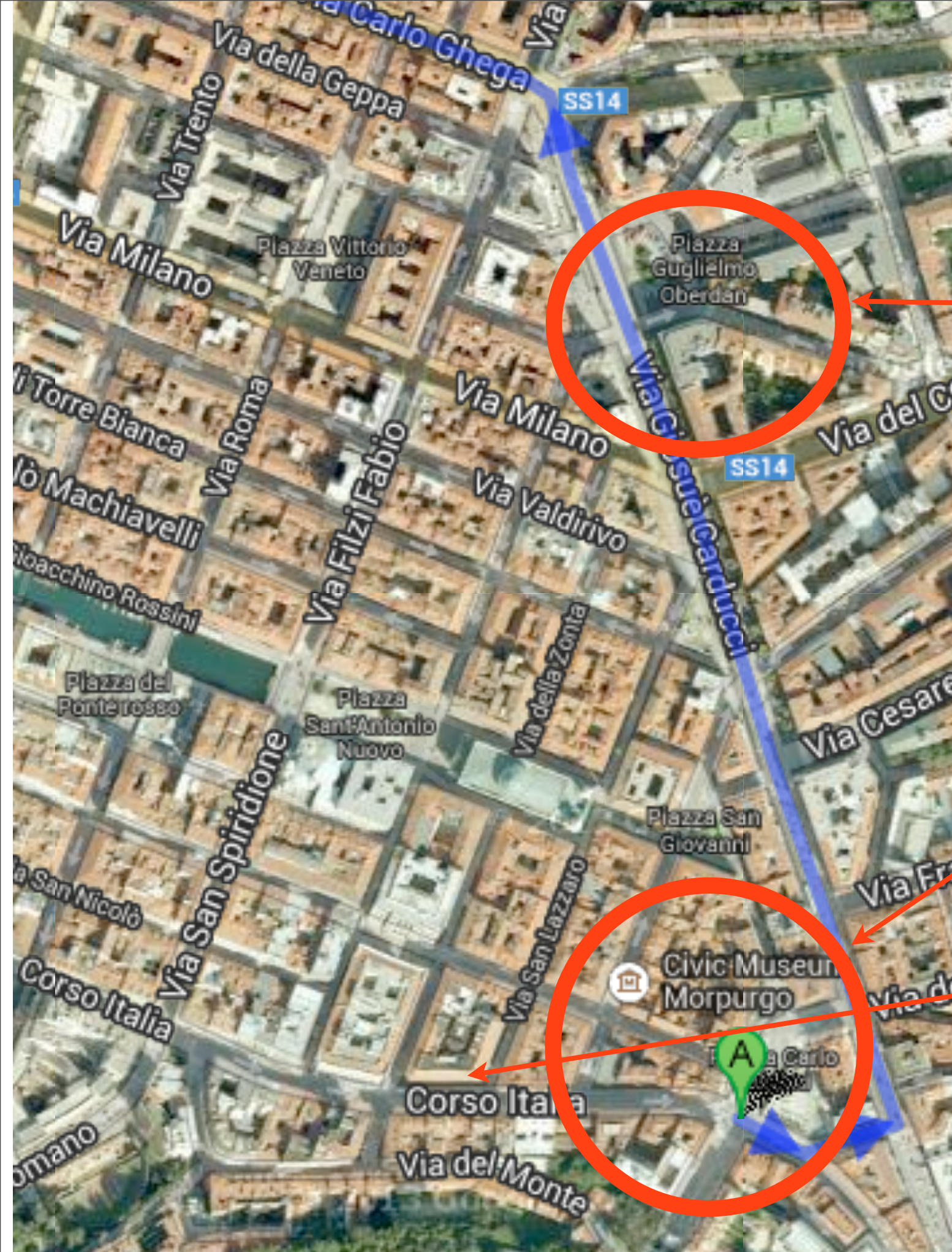


- 1) COOP
- 2) Lidl
- 3) Pam



- 1) Coin
- 2) Upim
- 3) OVS
- 4) Red
- 5) Zuiki
- 6) Torri d'Europa
- 7) Giulia center
- 8) Bernardi





Piazza Oberdan

Piazza Goldoni

Umip, Coin,
Zuiki and Red

Torri d'Europa



1) Bus No. 6, get off at central train station and take Bus No. 8

2) Bus No. 6, get off at Piazza Oberdan. Take Bus No. 29 at Piazza Goldoni

Giulia shop center Bus No. 6 or 36



Giulia shop center Bus No. 6 and 36



Halal meat

Mr. Ahmad form Turkish



Halal meat

Mr. Ahmad form Turkish



Coop and
other
supermarket

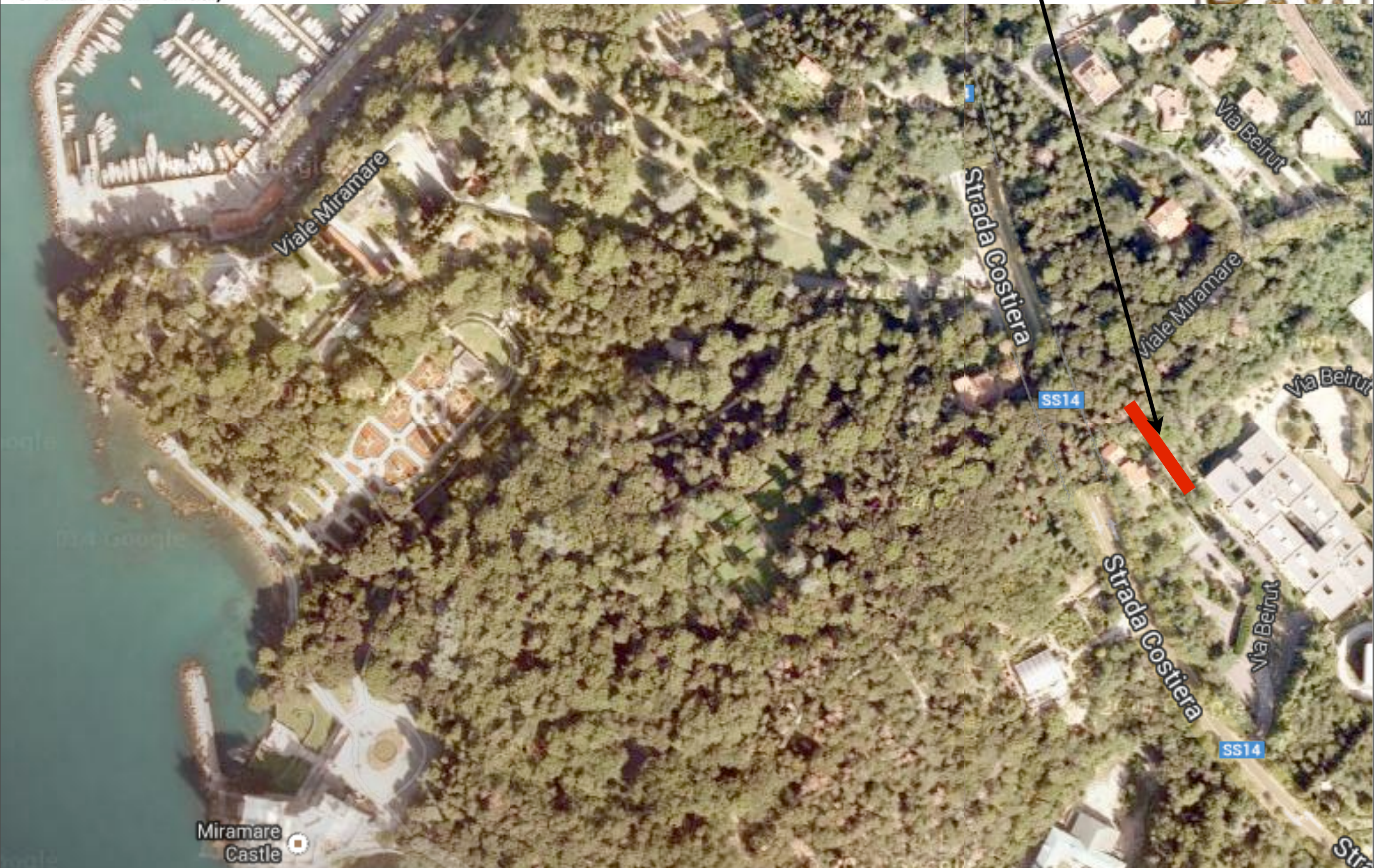
Castello di Miramare

built by order of
[Ferdinand Maximilian](#)
(1832–1867)



Castello di Miramare

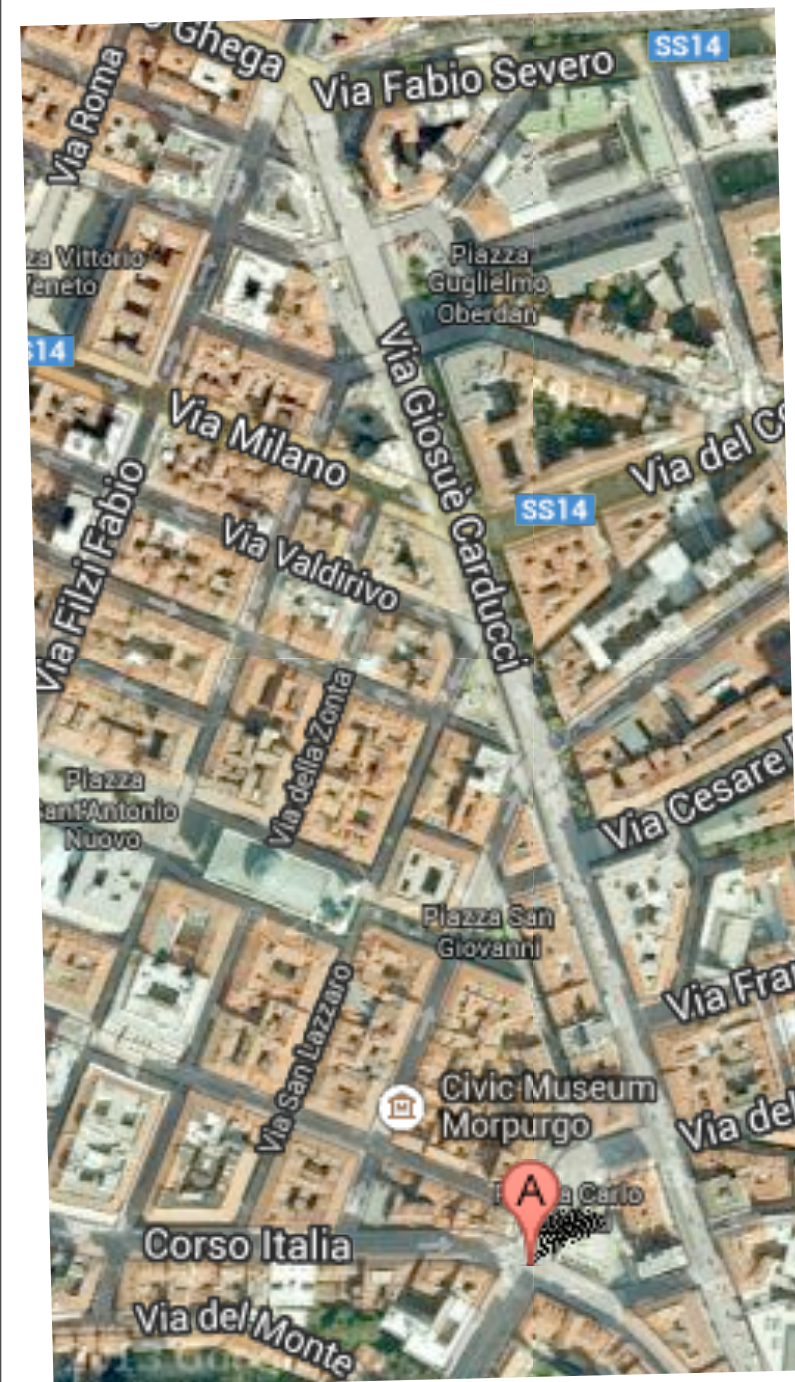
Scala Dirac



Piazza Unita



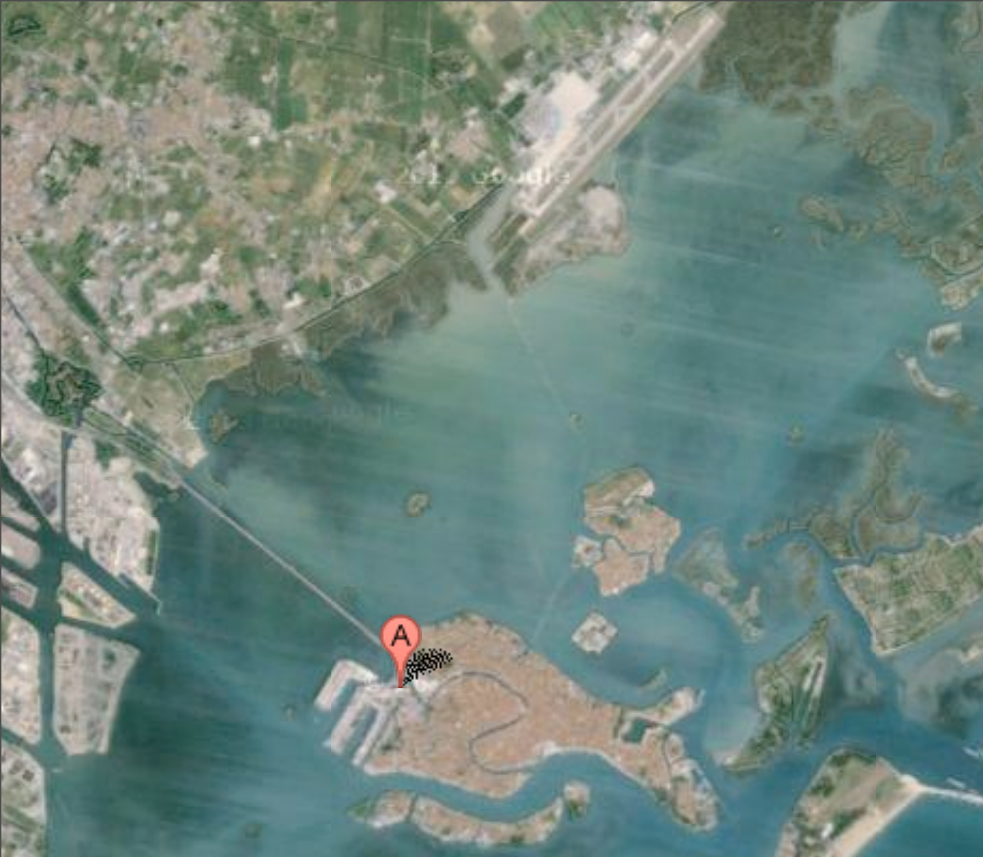
Grotta Gigante cave



Take bus No. 42 at
Piazza Oberdan

Travel to Venice

<http://www.trenitalia.com/>



Monday, June 23, 2014

از توجه شما سپاسگزارم