

# High-energy cosmic rays as messengers: from space to the ground



UNIVERSITÀ  
DEL SALENTO

  
Dipartimento di Matematica e Fisica  
"Ennio De Giorgi"



# Excursion to OTRANTO (Sun 15/6)

## Social event:

- seminar open to the public in the castle in the morning
- afternoon free for visiting and swimming!



High-energy cosmic rays  
as messengers: from space  
to the ground

**ISAPP INTERNATIONAL DOCTORATE SCHOOL**  
**15 Giugno 2025**  
**Castello di OTRANTO**

<https://agenda.infn.it/e/ISAPP2025Lecce>

**Catching the highest energy  
cosmic messengers**  
I SEGRETI DEI RAGGI COSMICI

 **Prof. Miguel Mostafà,**  
Dean of the College of Science and Technology  
Temple University, USA



**Local Organizing Committee**  
University of Salento and INFN Lecce:  
Lorenzo Perrone (chair), Paolo Bernardini, Gabriella  
Cataldi, Maria Rita Coluccia, Matteo Conte,  
Francesco de Palma, Emanuele De Vito, Ugo  
Giaccari, Daniele Marfello, Daniele Montanino,  
Viviana Scherini, Antonio Surdo.

**Gran Sasso Science Institute:**  
Ivan De Mitri, Adriano Di Giovanni, Carmelo Evoli,  
Pierpaolo Savina

**Evento patrocinato dal  
Comune di Otranto**  
Lorenzo Perrone (chair),  
Paolo Bernardini, Gabriella  
Cataldi, Maria Rita Coluccia, Matteo Conte,

**ISAPP Steering Committee**  
<https://www.isapp-schools.org/steering-committee>



# Some historical hints

Otranto occupies the site of the ancient Greek city *Hydrus* or *Hydruntum* (In Latin)

Relevant in Roman time (connections to the East)

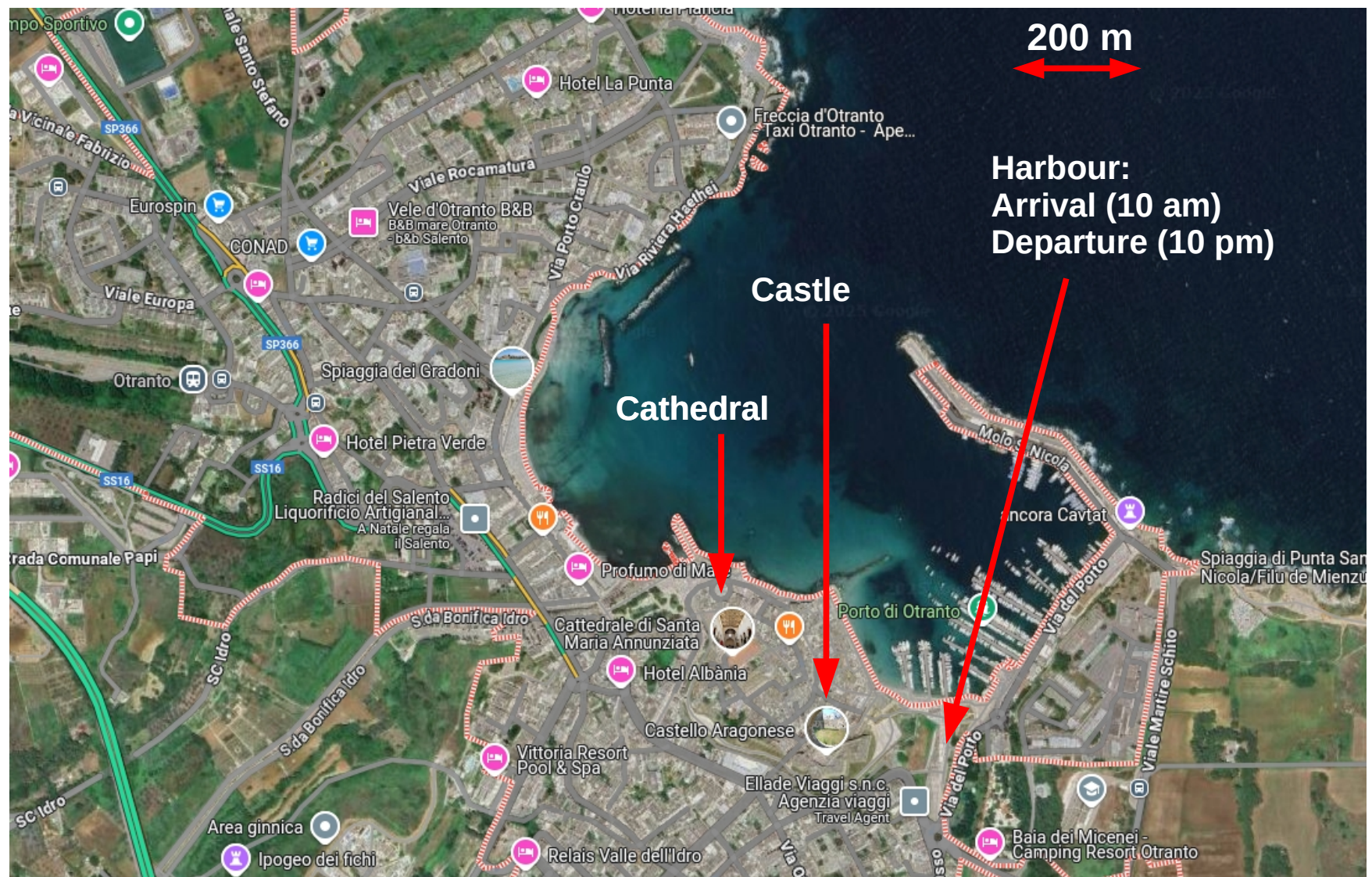
Then it was part of the Byzantine Emperor in the early Middle Age and then part of the Norman realm since 1068.

Then the city suffered the crude Ottoman invasion (1480) that halved the population. The bones of the 800 beheaded martyrs are still preserved in the Cathedral today.

Then went under the kingdom of Naples for long time with many other vicissitudes

Curiosity → Otranto is the setting of Horace Walpole's book *The Castle of Otranto*, which is generally held to be the first Gothic novel.







# Main sights: Castle

Castello Aragonese (Castle), very ancient fortress reinforced by Emperor Frederick II and rebuilt by Alphonso II of Naples in 1485–98. It has an irregular plan with five sides, with a moat running along the entire perimeter.



View of the entrance side



View of the harbor



# Main sights: Cathedral and Crypt



The Cathedral, Romanesque architecture (1088)  
→ adorned later (about 1163), with a mosaic floor representing the tree of life;

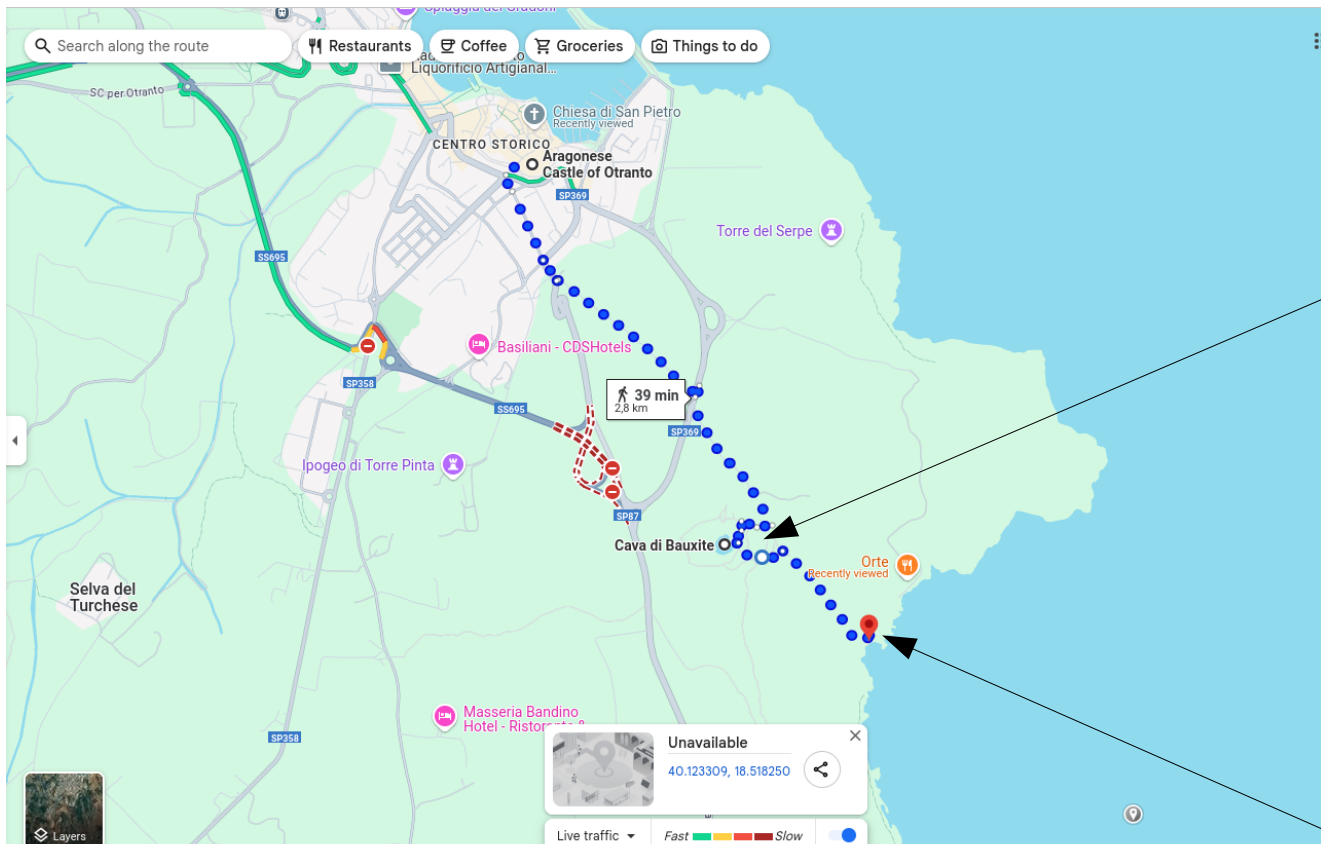
→ it has a rose window and side portal of 1481.  
The interior, a basilica with nave and two aisles,

→ very ancient crypt with all the capitals being different.

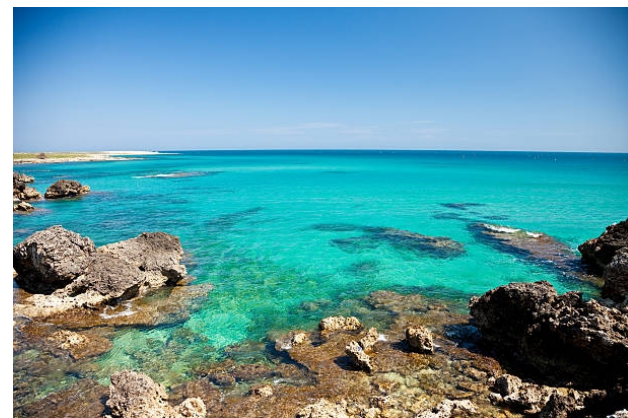




# Main sights: surroundings



Bauxite cave (2 km, 30 minutes)



Orte (2.8 km, 40 minutes)



# Food!

Tomorrow at the departure you will receive a voucher (15 Euro) from the **Seafood restaurant “SoFish”** Corso Garibaldi, 39 – Otranto, located 200 m from the Castle



**You can use the voucher anytime  
between 12 and 21**

→ consult the digital menu at  
<https://www.digitavolo.com/sofish>

# Final recommendations

Take a hat at hands and bring sun cream and extra-water with you !

Make sure you're well on time for the return journey, as the bus leaves at 10pm.

Here is my contact +393474422734

Should you want to come back to Lecce earlier, please use the SalentoInBus service (active since yesterday)

<https://www.provincia.le.it/salento-in-bus-orari-e-linee/>

Line 101 and Line 106

