



**Orfeus**



## **6<sup>th</sup> AdriaArray Workshop 2025, San Servolo (Venice), Italy 11 – 14 March 2025**

The 6<sup>th</sup> AdriaArray Workshop that will be held in San Servolo (Venice lagoon), Italy, on 11 – 14 March, 2025, at the San Servolo Conference Center. The workshop is locally organized by the Istituto Nazionale di Geofisica e Vulcanologia. It is organized together with the Bulgarian Geophysical Society, Institute of Geophysics CAS, Prague and University Kiel.

The workshop is sponsored by Istituto Nazionale di Geofisica e Vulcanologia and ORFEUS.

Information on AdriaArray – its scope, aims, and status – can be found under this link:

[https://orfeus.readthedocs.io/en/latest/adria\\_array\\_main.html](https://orfeus.readthedocs.io/en/latest/adria_array_main.html)

Further information on the workshop is given in the 3<sup>rd</sup> announcement:

[https://github.com/PetrColinSky/AdriaArray/blob/master/SanServolo2025/AdA\\_Workshop\\_2025\\_3.pdf](https://github.com/PetrColinSky/AdriaArray/blob/master/SanServolo2025/AdA_Workshop_2025_3.pdf)

### **Program**

The program overview and program details are given below. All sessions take place in the **Auditorium** if not indicated differently.

program version: February 27, 10:00 CET

<b>Tuesday, March 11</b>	program overview
<b>08:30 – 9:00</b>	<b>Registration</b>
<b>09:00 - 10:30</b>	<b>Session 1: Welcome &amp; Adriatic geodynamics: progress and frontiers</b>
	<b>Coffee break</b>
<b>11:00 - 12:30</b>	<b>Session 2: Adriatic geodynamics: progress and frontiers – continued</b>
	<b>Light lunch</b> (served)
<b>14:00 - 15:30</b>	<b>Session 3: Physical structure and evolution of the lithosphere in the Adriatic region: what we can and cannot resolve with seismic imaging</b>
	<b>Coffee break</b>
<b>16:00 - 17:00</b>	<b>Poster advertisement</b>
<b>17:00 – 18:00</b>	<b>Poster session 1</b> (Sala E Palazzina Grecale)
<b>18:00 – 19:00</b>	<b>Poster session 2</b> (Sala E Palazzina Grecale)

<b>Wednesday, March 12</b>		
<b>09:00 - 10:30</b>	<b>Session 4: Physical structure and evolution of the lithosphere in the Adriatic region: what we can and cannot resolve with seismic imaging – continued</b>	
	<b>Coffee break</b>	
<b>11:00 - 12:30</b>	<b>Session 5: Physical structure and evolution of the lithosphere in the Adriatic region: what we can and cannot resolve with seismic imaging – continued and Seismicity and seismic sources in the AdriaArray region</b>	
	<b>Light lunch</b> (served)	
<b>14:00 - 15:30</b>	<b>Break-out session 1: Seismicity and seismic sources</b> (Auditorium)	<b>Break-out session 2: Slabs in the Adriatic region: what do we know?</b> (Room 6)
	<b>Coffee break</b>	
<b>16:00 - 17:30</b>	<b>Break-out session 3: The western margin of the Adriatic Plate: concepts and experiments</b>	
<b>17:30 – 19:00</b>	<b>Break-out session 4: The eastern margin of the Adriatic Plate: concepts and experiments</b>	

<b>Thursday, March 13</b>		
<b>09:00 - 10:15</b>	<b>Session 6: Seismicity and seismic sources in the AdriaArray region – continued</b>	
	<b>Coffee break</b>	
<b>11:00 - 12:30</b>	<b>Break-out session 5: AdriaArray: Data access and data quality</b>	
	<b>Light lunch</b> (served)	
<b>14:00 - 15:30</b>	<b>Break-out session 6: Receiver functions</b>	
	<b>Coffee break</b>	
<b>16:00 - 17:30</b>	<b>Break-out session 7: Ambient noise and surface wave tomography</b>	
<b>18:00 – 19:00</b>	<b>AdriaArray Steering Committee Meeting</b> (Auditorium)	<b>Early Career Scientist Networking Evening</b> (Room 6)

<b>Friday, March 14</b>		
<b>09:00 - 11:00</b>	<b>Concluding plenary discussion</b>	

## Detailed Program

### Session 1 ‘Adriatic geodynamics: progress and frontiers’

**Tuesday 9:00 – 10:30** (Auditorium)

9:00 – 9:10	<b>Piromallo, C.</b>	Welcome
9:10 – 9:30	<b>Meier, T.</b> , Kolínský, P.	AdriaArray: Status and Challenges
9:30 – 9:50	<b>Chiarabba, C.</b>	Continental deformation and seismicity in the Adriatic region
9:50 – 10:10	<b>Faccenna, C.</b>	Adria’s motion: Causes and consequences
10:10 – 10:30	<b>Papazachos, C.</b> (online)	The Santorini 2024-2025 volcanotectonic unrest: Lessons from the past and constraints from seismic, GNSS and InSAR information

### Session 2 ‘Adriatic geodynamics: progress and frontiers’

**Tuesday 11:00 – 12:30** (Auditorium)

11:00 – 11:15	<b>Cammarano, F.</b>	Petrological and thermal constraints for interpreting seismic data
11:15 – 11:30	<b>Lebedev, S.</b>	Seismic thermography: quantifying the physical structure of the lithosphere and its controls on seismicity and natural resources
11:30 – 11:45	<b>Ganas, A.</b> (online)	Deformation rates and crustal block modeling in western Greece from GNSS data
11:45 – 12:00	<b>Fodor, L.</b>	Migration of extensional deformation, basin subsidence, magmatism in the Pannonian Basin: constraints from observations and numerical models
12:00 – 12:15	<b>Mazur, S.</b>	Crustal Structure and Tectonic Models of the Western Carpathians from Deep Seismics and Potential Fields
12:15 – 12:30	<b>Nagel, T.</b> , Mulashev, I.	Massive crustal relamination in the Rhodope metamorphic province

**Session 3 ‘Physical structure and evolution of the lithosphere in the Adriatic region: what we can and cannot resolve with seismic imaging’**

**Tuesday 14:00 – 15:30** (Auditorium)

14:00 – 14:15	Carminati, E., <b>Chiarabba, C.</b> , Giacomuzzi, G., Maresca, A., Tavani, S.	Diachronous subduction-to-delamination transition in the Apennines
14:15 – 14:30	<b>Monna S.</b> , Montuori C., Bonatto L., Piromallo C.	Study cases in the AdriaArray region based on P and S receiver function non-automated analysis
14:30 – 14:45	<b>Mohammadi, N.</b>	Crustal and upper mantle structure of the Alps and Apennines by Teleseismic full waveform inversion
14:45 – 15:00	<b>Kalmár, D.</b>	Mantle Transition Zone Structure in the Alpine-Carpathian-Dinarides: Evidence from P-to-S Receiver Function Analysis
15:00 – 15:15	<b>Kolínský, P.</b>	Surface wave diffraction as seen by the AdA records
15:15 – 15:30	<b>Delage, K.</b>	Extraction of coherent wavefronts from seismic ambient noise by using Matched-Filtering

**Session 4 ‘Physical structure and evolution of the lithosphere in the Adriatic region: what we can and cannot resolve with seismic imaging’**

**Wednesday 9:00 – 10:30** (Auditorium)

9:00 – 9:15	<b>Crosetto, S.</b>	On-shore tectonics of the Kefalonia Transform Fault Zone
9:15 – 9:30	<b>Loreto, F.</b> , Ferrante, V., Nomikou, P., Ganas, A., Lampridou, D., Merino, I., Palmiotto, C., Petracchini, L., Ligi, M., Ranero, C.	Exploring of the Cephalonia Fault Zone and related geohazard elements shaping the Ionian Islands (Western Greece)
9:30 – 9:45	<b>Ranero, C.</b>	Current tectonics in the Ionian region
9:45 – 10:00	<b>Evangelidis, C.</b> (online)	SKS and source side anisotropy measurements in Greece
10:00 – 10:15	<b>Yuan, X.</b> , Schurr, B., Tilmann, F., Heit, B., Dushi, E., Rama, B., Rietbrock, A., Frietsch, M., Agurto-Detzel, H., Kufner, S.-K., Terhünte, S.	Preliminary receiver function analysis of the ANTICS Large-N experiment in Albania
10:15 – 10:30	<b>Stipčević, J.</b> , Belinić Topić, T., Rondenay, S.	Imaging lithospheric structure under the Dinarides using AdriaArray data

**Session 5 ‘Physical structure and evolution of the lithosphere in the Adriatic region: what we can and cannot resolve with seismic imaging’ and ‘Seismicity and seismic sources in the AdriaArray region’**

**Wednesday 11:00 – 12:30** (Auditorium)

11:10 – 11:15	<b>Gkogkas, K.</b>	Seismic Imaging Results at the PACASE portion of the AdriaArray project
11:15 – 11:30	<b>Soni, T.</b>	tba
11:30 – 11:45	<b>Plomerová, J.</b> , Zlebcikova, H., Kvapil, J., Vecsey, L.	Effect of inversion volume size on body-wave tomography images - an example from the E. Alps
11:45 – 12:00	<b>Rietbrock, A.</b>	First results of the ANTICS large-N deployment in Albania
12:00 – 12:15	<b>Tomanović, M.</b>	Seismic zones and seismicity since 2018-2024 for the territory of Montenegro and surroundings
12:15 – 12:30	<b>Cambaz, D.</b>	tba

## Session 6 'Seismicity and seismic sources in the AdriaArray region'

Thursday 9:00 – 10:15 (Auditorium)

9:00 – 9:15	<b>Fonteijn, M.</b>	Deciphering tectonic driving mechanisms of seismicity in the central Apennines
9:15 – 9:30	<b>Ktenidou, O.</b>	tba
9:30 – 9:45	<b>Papadopoulou, E.</b>	Environmental Impacts of Seismic Activity in the Ionian Sea: Application of Remote Sensing Techniques and the Environmental Seismic Intensity (ESI) 2007 Scale
9:45 – 10:00	<b>Rossi, G.</b>	Fault valve evidences in Northern Adria
10:00 – 10:15	<b>Xhahysa, A., Kuka, N. (online)</b>	Updated Seismic Hazard Map of Albania, NSHMA24

## Posters (Sala E Palazzina Grecale)

<b>Abdi, F.</b>	Automatic Focal Mechanism Computation for Small-Magnitude Earthquakes in NE Italy
<b>Amashukeli, T.</b>	Upgrading the Seismic Network in Ukraine's Carpathian Region
<b>Baccheschi, P.</b>	Imaging the deep structure of Italy through SKS anisotropy tomograph
<b>Bernauer, F.</b>	KAROS: A proposal for an amphibian multi component seismic experiment accross the Kefalonia Transform Fault
<b>Bonatto, L., Monna S., Montuori C., Piromallo C.</b>	Probing Mantle Heterogeneity Beneath the Central Mediterranean with P Receiver Functions
<b>Borleanu, F.</b>	Analysis of the 2023, ML 5.7 Southern Carpathians Earthquake Sequence
<b>Cvijić Amulić, S., Popović Krejić, L.</b>	tba
<b>Csatlós, M.</b>	Calibrating the Local Magnitude Scale for Hungary Using Permanent and Temporary Stations
<b>Czecz, B.</b>	Revised Seismicity Catalog of the Pannonian Basin Using Multiple-Event Relocation Algorithms: Local and Regional Scale Studies
<b>Dimitrova, L.</b>	The first year of operation of AdA stations in Bulgaria
<b>Di Stefano, R., Maria Grazia, C.</b>	The sP depth phases detection applied to the 2003 Jabuka seismic sequence
<b>Eckel, F.</b>	Surface Wave Tomography of Southern Italy
<b>El-Sayed, H.</b>	tba
<b>El-Sharkawy, A.</b>	Seismic anisotropy beneath the Alpine-Dinarides region: insights from surface waves and shear wave splitting measurements
<b>Kampfová Exnerová, H., Plomerová, J., AdriaArray Seismology Group</b>	Moho depth from Ps receiver functions in the northern promontory of the AdriaArray
<b>Farfaliak, L.</b>	Installation Site of Trillium Slim Posthole: First Practice of the Installation of a Trillium Slim Posthole Seismometer in Ukraine (Liubeshka LUBU Station)
<b>Fojtková, L.</b>	Seismic Activity in Eastern Slovakia
<b>Fragkouli, K.</b>	tba
<b>Rossetti, F.</b>	Deformation styles and exhumation patterns in the Albanides-Hellenides orogenic belt
<b>Genjac-Zukić, M., Krehić, A.</b>	AdriaArray data in Bosnia and Herzegovina
<b>Georgieva, G.</b>	First receiver functions for AdA stations in Bulgaria
<b>Hamed, A.</b>	Investigating Wind Storm Dynamics Through European Broadband Seismic Station Records
<b>Horn, N.</b>	Contribution of GeoSphere Austria to AdriaArray
<b>Kaviris, G.</b>	tba
<b>Korniienko, Y.</b>	tba
<b>Lukešová, R., Fojtková, L., Borleanu, F.</b>	AdriaArray local experiment in the Vrancea Seismic Zone
<b>Molinari, I.</b>	tba
<b>Montuori, C., Monna, S.</b>	Lithospheric structure and mantle wedge below the Tyrrhenian and Ionian basins (Central Mediterranean) from P and S receiver functions
<b>Mustafa, S.</b>	tba
<b>Nagel, T.</b>	Massive relamination in the Rhodopes

<b>Najdovska, J.</b> , Droghesha, K., Chernih, D.	A Study of Seismicity and the Most Powerful Earthquakes in the Epicentral area Skopje
<b>Papageorgiou, A.</b>	tba
<b>Pesaresi, D.</b>	OGS contribution to AdriaArray: state of the art
<b>Petrescu, L.</b>	Surface waves and SKS anisotropy: Probing subsurface structures and deformation between Adria and Eurasia
<b>Pondrelli, S.</b>	tba
<b>Prada, M.</b>	ODISSEY: Peloponnese and Ionian Island continental margin seismic study
<b>Rama, B.</b> , Dushi, E., Dyrnishi, M., Gjata, A.	Stress analysis in the Albanian region using Moment Tensors and the contribution of AdriaArray stations to the solutions
<b>Rewers, J.</b> , Šroda, P.	Investigating upper mantle anisotropy beneath the Western Carpathians and Sudetes using shear-wave splitting analysis
<b>Roisenberg, H.</b>	Vp/Vs ratio and crustal thickness of the greater alpine crust using h-k stacking
<b>Schurr, B.</b>	The 2019 Durres earthquake aftershock sequence
<b>Šroda, P.</b>	tba
<b>Stefanelli, I.</b>	Crustal and uppermost mantle structure of Dinarides from Local earthquake tomography: preliminary results from Adria-Array data
<b>Stipčević, J.</b>	Joint Norwegian and Croatian deployment of seismic stations within AdriaArray - the CRONOS network
<b>Tamtas, D.</b>	A Closer Look at Montenegro's Seismicity Through the March 2024 Earthquake
<b>Tilman, F.</b>	Planned developments for submarine monitoring in the Ionian Sea
<b>Vičić, B.</b> , Rajh, G.	Patterns in 20 years of relocated seismicity in Slovenia
<b>Vuorinen, T.</b>	Applying template matching to Vrancea area seismicity using AdriaArray data

#### Break-out sessions

	<b>Title</b>	<b>Conveners</b>	<b>Presentations by</b>
<b>1</b>	Seismicity and seismic sources	Borleanu, F., Dushi, E., Rama, B., Rietbrock, A., Tilman, F.	tba
<b>2</b>	Slabs in the Adriatic region: what do we know?	El-Sharkawy, A., Meier, T., Piromallo, C.	Meier, T., El-Sharkawy, A.
<b>3</b>	The western margin of the Adriatic Plate: concepts and experiments	Fontein, M., Heit, B.	Faccenna, C., Pondrelli, S., Chiarabba, C.
<b>4</b>	The eastern margin of the Adriatic Plate: concepts and experiments	Crosetto, S., Ranero, C.	Crosetto, S., Prada, M., Loreto, F., Bernauer, F., Rietbrock, A., Tilman, F.
<b>5</b>	AdriaArray: Data access and data quality	Eckel, F., Kolínský, P.	tba
<b>6</b>	Receiver functions	Georgieva, G., Kalmár, D., Rondenay, S., Stipčević, J., Yuan, X.	tba
<b>7</b>	Ambient noise and surface wave tomography	Molinari, I., Petrescu, L.	Menichelli, I.

**Early Career Scientist Networking Evening** (conveners: Eckel, F., Roisenberg, H., Soni, T., Room 6)