









### 6th 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

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

https://github.com/PetrColinSky/AdriaArray/blob/master/SanServolo2025/AdA Workshop 20 25 3.pdf

#### **Program**

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

program version: March 5, 15:30 CET

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

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

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

Friday, March 14	
09:00 - 11:00	Concluding plenary discussion
	Coffee and greetings

### **Detailed Program**

Session 1 'Adriatic geodynamics: progress and frontiers'

**Tuesday 9:00 – 10:30** (Auditorium)

9:00 - 9:10	Piromallo, C.	Welcome
9:10 - 9:30	Meier, T., Kolínský, P.	AdriaArray: Status and Challenges
9:30 - 9:50	Chiarabba, C.	Continental deformation and seismicity in the
		Adriatic region
9:50 - 10:10	Faccenna, C.	Adria's motion: Causes and consequences
10:10 - 10:30	Papazachos, C. (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	Cammarano, F.	Petrological and thermal constraints for interpreting seismic data
11:15 – 11:30	Lebedev, S.	Seismic thermography: quantifying the physical structure of the lithosphere and its controls on seismicity and natural resources
11:30 – 11:45	Ganas, A. (online)	Deformation rates and crustal block modeling in western Greece from GNSS data
11:45 – 12:00	Fodor, L.	Migration of extensional deformation, basin subsidence, magmatism in the Pannonian Basin: constraints from observations and numerical models
12:00 – 12:15	Mazur, S.	Crustal Structure and Tectonic Models of the Western Carpathians from Deep Seismics and Potential Fields

12:15 – 12:30	Nagel, T., 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., Chiarabba, C.,	Diachronous subduction-to-delamination
	Giacomuzzi, G., Maresca, A., Tavani, S.	transition in the Apennines
14:15 – 14:30	Monna S., Montuori C., Bonatto L.,	Study cases in the AdriaArray region based on P
	Piromallo C.	and S receiver function non-automated analysis
14:30 – 14:45	Mohammadi, N.	Crustal and upper mantle structure of the Alps
		and Apennines by Teleseismic full waveform
		inversion
14:45 – 15:00	Kalmár, D.	Mantle Transition Zone Structure in the Alpine-
		Carpathian-Dinarides: Evidence from P-to-S
		Receiver Function Analysis
15:00 – 15:15	Kolínský, P.	Surface wave diffraction as seen by the AdA
		records
15:15 – 15:30	Delage, K.	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	Crosetto, S.	On-shore tectonics of the Kefalonia Transform Fault Zone
9:15 – 9:30	Loreto, F., 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	Ranero, C.	Current tectonics in the Ionian region
9:45 – 10:00	Evangelidis, C. (online)	SKS and source side anisotropy measurements in Greece
10:00 – 10:15	Yuan, X., Schurr, B., Tilmann, F., Heit, B., Dushi, E., Rama, B., Rietbrock, A., Frietsch, M., Agurto-Detzel, H., Kufner, SK., 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	Gkogkas, K.	Seismic Imaging Results at the PACASE portion of the AdriaArray project
11:15 – 11:30	Soni, T., Schiffer, C., Mazur, S.	Receiver Function results from the passive seismic experiment in the Western Carpathians-inference for the tectonic contact between North Europe and ALCAPA
11:30 – 11:45	Plomerová, J., Žlebčíková, 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	Rietbrock, A.	First results of the ANTICS large-N deployment in Albania
12:00 – 12:15	Tomanović, M.	Seismic zones and seismicity since 2018-2024 for the territory of Montenegro and surroundings
12:15 – 12:30	Cambaz, D.	The seismic activity at the southeastern edge of the AdriaArray region, as observed through the

	recent deployments within the KOERI seismic
	network

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

### **Thursday 9:00 – 10:15** (Auditorium)

9:00 – 9:15	Fonteijn, M.	Deciphering tectonic driving mechanisms of seismicity in the central Apennines
9:15 - 9:30	Ktenidou, O.	tba
9:30 – 9:45	Papadopoulou, E.	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	Rossi, G.	Fault valve evidences in Northern Adria
10:00 – 10:15	Xhahysa, A., Kuka, N. (online)	Updated Seismic Hazard Map of Albania, NSHMA24

### Posters (Sala E Palazzina Grecale)

Abdi, F.	Automatic Focal Mechanism Computation for Small-Magnitude Earthquakes in NE Italy	
Amashukeli, T.	Upgrading the Seismic Network in Ukraine's Carpathian Region	
Baccheschi, P.	Imaging the deep structure of Italy through SKS anisotropy tomograph	
Bernauer, F.	KAROS: A proposal for an amphibian multi component seismic experiment accross the Kefalonia Transform Fault	
<b>Bonatto, L.,</b> Monna S., Montuori C., Piromallo C.	Probing Mantle Heterogeneity Beneath the Central Mediterranean with P Receiver Functions	
Borleanu, F.	Analysis of the 2023, ML 5.7 Southern Carpathians Earthquake Sequence	
Cvijić Amulić, S., Popović Krejić, L.	Seismological network and seismicity in Bosnia and Herzegovina - before and during the AdriaArray project	
Csatlós, M.	Calibrating the Local Magnitude Scale for Hungary Using Permanent and Temporary Stations	
Czecze, B.	Revised Seismicity Catalog of the Pannonian Basin Using Multiple- Event Relocation Algorithms: Local and Regional Scale Studies	
Dimitrova, L.	The first year of operation of AdA stations in Bulgaria	
Di Stefano, R., <b>Maria Grazia, C.</b>	The sP depth phases detection applied to the 2003 Jabuka seismic sequence	
Eckel, F.	Surface Wave Tomography of Southern Italy	
El-Sayed, H.	The Role of Multi-National Seismological Network in South Europe: Advancing Geodynamics Understanding, Multi-Hazard Risk Analysis, and Early Warning Systems	
El-Sharkawy, A.	Seismic anisotropy beneath the Alpine-Dinarides region: insights from surface waves and shear wave splitting measurements	
<b>Kampfová Exnerová, H.,</b> Plomerová, J., AdriaArray Seismology Group	Moho depth form Ps receiver functions in the northern promontory of the AdriaArray	
Farfuliak, L.	Installation Site of Trillium Slim Posthole: First Practice of the Installation of a Trillium Slim Posthole Seismometer in Ukraine (Liubeshka LUBU Station)	
Fojtíková, L.	Seismic Activity in Eastern Slovakia	
Fragkouli, K.	tba	
Rossetti, F.	Deformation styles and exhumation patterns in the Albanides- Hellenides orogenic belt	
Genjac-Zukić, M., Krehić, A.	AdriaArray data in Bosnia and Herzegovina	
Georgieva, G.	First receiver functions for AdA stations in Bulgaria	
Hamed, A.	Investigating Wind Storm Dynamics Through European Broadband Seismic Station Records	
Horn, N.	Contribution of GeoSphere Austria to AdriaArray	
Kaviris, G.	Seismicity of Euboea – Central Greece since 2018	
Kolínský, P., Meier, T. and the AdA Seismology Group	AdriaArray Seismic Network - status in March 2025	

Kamalaania Ohanaa K. V. O. i. i. i. i.	A non-old annual for testants and the test	
Korniyenko-Sheremet, Y., Saintot, A.,	A new old approach for a tectonic reconstruction: results of the	
Seghedi, A., McCann, T. Sosson, M.	structural analysis in the North Dobrogea zone of the TTZ	
<b>Lukešová, R.,</b> Fojtíková, L., Borleanu, F.	AdriaArray local experiment in the Vrancea Seismic Zone	
Montuori, C., Monna, S.	Lithospheric structure and mantle wedge below the Tyrrhenian and Ionian basins (Central Mediterranean) from P and S receiver functions	
Mustafa, S.	tba	
Nagel, T.	Massive relamination in the Rhodopes	
Najdovska, J., Drogreshka, K.,	A Study of Seismicity and the Most Powerful Earthquakes in the	
Chernih, D.	Epicentral area Skopje	
Papageorgiou, A.	tba	
Pesaresi, D.	OGS contribution to AdriaArray: state of the art	
Petrescu, L.	Surface waves and SKS anisotropy: Probing subsurface structures and deformation between Adria and Eurasia	
Pondrelli, S.	tba	
Prada, M.	ODISSEY: Peloponnese and Ionian Island continental margin seismic study	
Rama, B., Dushi, E., Dyrmishi, M.,	Stress analysis in the Albanian region using Moment Tensors and	
Gjata, A.	the contribution of AdriaArray stations to the solutions	
Rewers, J., Środa, P.	Investigating upper mantle anisotropy beneath the Western Carpathians and Sudetes using shear-wave splitting analysis	
Roisenberg, H.	Vp/Vs ratio and crustal thickness of the greater alpine crust using h-k stacking	
Schurr, B.	The 2019 Durres earthquake aftershock sequence	
Środa, P., Rewers, J.	Receiver function imaging of Moho depth anomalies in the Western Carpathians based on data from PACASE and AdriaArray seismic experiments	
Stefanelli, I.	Crustal and uppermost mantle structure of Dinarides from Local earthquake tomography: preliminary results from Adria-Array data	
Stipčević, J.	Joint Norwegian and Croatian deployment of seismic stations within AdriaArray - the CRONOS network	
Tamtas, D.	A Closer Look at Montenegro's Seismicity Through the March 2024 Earthquake	
Tilmann, F.	Planned developments for submarine monitoring in the Ionian Sea	
Vičič, B., Rajh, G.	Patterns in 20 years of relocated seismicity in Slovenia	
Vuorinen, T.	Applying template matching to Vrancea area seismicity using AdriaArray data	

#### **Break-out sessions**

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