

## EMRP – Earth Magnetism & Rock Physics (#EGU17EMRP) – Orals

### Monday, 24 April

<b>MO1</b> , 08:30–10:00	<b>TS2.3/EMRP4.21/ERE5.7</b> , Structures and patterns in fractured and porous media: witnesses for paleostress and fluid flow (co-organized), <b>08:30–12:00, Room G1</b>
	<b>GI3.5/EMRP4.36</b> , Innovative instrumentation and data processing methods in near surface geophysics (co-organized), <b>08:30–10:00, Room 0.49</b>
	<b>GD3.1/EMRP4.41/GMPV6.6/PS9.3/SM10.12</b> , Dynamics of the mantle and core in the Earth and planetary bodies: from magma oceans to the present day (co-organized), <b>08:30–17:00, Room D1</b>
<b>MO2</b> , 10:30–12:00	<b>TS2.3/EMRP4.21/ERE5.7</b> , Structures and patterns in fractured and porous media: witnesses for paleostress and fluid flow (co-organized), <b>08:30–12:00, Room G1</b>
	<b>GD3.1/EMRP4.41/GMPV6.6/PS9.3/SM10.12</b> , Dynamics of the mantle and core in the Earth and planetary bodies: from magma oceans to the present day (co-organized), <b>08:30–17:00, Room D1</b>
<b>MOL</b> , 12:15–13:15	<b>UMI0</b> , Plenary, <b>12:15–13:15, Room E1</b>
<b>MO3</b> , 13:30–15:00	<b>SM2.2/EMRP4.13/GD5.8/NH4.13/TS5.7</b> , Understanding large subduction earthquakes by integrating geological and geophysical observations, laboratory results, and numerical modeling (co-organized), <b>13:30–17:00, Room 0.96</b>
	<b>TS2.1/EMRP4.20</b> , Faults: the deformation they cause and their effect on long-term crustal strength (co-organized), <b>13:30–15:00, Room G1</b>
	<b>GD3.1/EMRP4.41/GMPV6.6/PS9.3/SM10.12</b> , Dynamics of the mantle and core in the Earth and planetary bodies: from magma oceans to the present day (co-organized), <b>08:30–17:00, Room D1</b>
<b>MO4</b> , 15:30–17:00	<b>SM2.2/EMRP4.13/GD5.8/NH4.13/TS5.7</b> , Understanding large subduction earthquakes by integrating geological and geophysical observations, laboratory results, and numerical modeling (co-organized), <b>13:30–17:00, Room 0.96</b>
	<b>GD3.1/EMRP4.41/GMPV6.6/PS9.3/SM10.12</b> , Dynamics of the mantle and core in the Earth and planetary bodies: from magma oceans to the present day (co-organized), <b>08:30–17:00, Room D1</b>

### Tuesday, 25 April

<b>TU1</b> , 08:30–10:00	<b>EMRP2.3</b> , Electromagnetic geophysics, <b>08:30–12:00, Room 0.31</b>
	<b>SM2.1/EMRP4.12</b> , Earthquake source processes - Imaging methods, numerical modeling and scaling (co-organized), <b>08:30–15:00, Room M1</b>
	<b>GD6.2/CL1.32/CR5.6/EMRP4.29/SM10.6/TS9.7</b> , Unveiling the structure, evolution and influence of the Antarctic Lithosphere (co-organized), <b>08:30–10:00, Room L7</b>
<b>TU2</b> , 10:30–12:00	<b>EMRP2.3</b> , Electromagnetic geophysics, <b>08:30–12:00, Room 0.31</b>
	<b>NH4.5/AS4.31/EMRP4.4/SM9.3</b> , Short-term Earthquakes Forecast (StEF) and multi-parametric time-Dependent Assessment of Seismic Hazard (t-DASH) (co-organized), <b>10:30–12:00, Room L6</b>
	<b>SM2.1/EMRP4.12</b> , Earthquake source processes - Imaging methods, numerical modeling and scaling (co-organized), <b>08:30–15:00, Room M1</b>

	<b>TS3.1/EMRP4.22</b> , Strain localisation and rheology of the lithosphere in nature, experiments and theory. Including the Stephan Mueller Medal lecture by Cees Passchier (co-organized), <b>10:30–17:00, Room D3</b>
<b>TU3</b> , 13:30–15:00	<b>EMRP1.3/GI3.16/GMPV6.1/SM2.4/TS5.6</b> , Earthquakes: from slow to fast, from the field to the laboratory (incl. Division Outstanding ECS Award Lecture by Marie Violay) (co-organized), <b>13:30–17:00, Room 0.31</b>
	<b>ML35/EMRP</b> , EMRP Division Outstanding ECS Award Lecture by Marie Violay (co-organized), <b>13:30–13:45, Room 0.31</b>
	<b>SM2.1/EMRP4.12</b> , Earthquake source processes - Imaging methods, numerical modeling and scaling (co-organized), <b>08:30–15:00, Room M1</b>
	<b>TS3.1/EMRP4.22</b> , Strain localisation and rheology of the lithosphere in nature, experiments and theory. Including the Stephan Mueller Medal lecture by Cees Passchier (co-organized), <b>10:30–17:00, Room D3</b>
<b>TU4</b> , 15:30–17:00	<b>EMRP1.3/GI3.16/GMPV6.1/SM2.4/TS5.6</b> , Earthquakes: from slow to fast, from the field to the laboratory (incl. Division Outstanding ECS Award Lecture by Marie Violay) (co-organized), <b>13:30–17:00, Room 0.31</b>
	<b>TS3.1/EMRP4.22</b> , Strain localisation and rheology of the lithosphere in nature, experiments and theory. Including the Stephan Mueller Medal lecture by Cees Passchier (co-organized), <b>10:30–17:00, Room D3</b>
	<b>GMPV1.3/EMRP4.32/ERE6.5/SSP1.8/TS3.8</b> , Multi-scale analysis of geological materials: Minerals, Fluids, Cracks, Pores & Permeability (Sponsored by AGU-VGP) (co-organized), <b>15:30–17:00, Room 2.20</b>
<b>TU6</b> , 19:00–20:00	<b>ML20/EMRP</b> , Louis Néel Medal Lecture by Christopher J. Spiers (co-organized), <b>19:00–20:00, Room D3</b>
<b>Wednesday, 26 April</b>	
<b>WE1</b> , 08:30–10:00	<b>EMRP1.4/GD7.6/NH3.17/SM6.3</b> , Rock physics and geomechanical characterisation of rocks from micro to macroscale: the role of anisotropy and hydro-mechanical coupling (co-organized), <b>08:30–12:00, Room 0.31</b>
	<b>G4.1/EMRP4.1/GD8.7/NH3.14/TS8.9</b> , Acquisition and processing of gravity and magnetic field data and their integrative interpretation (co-organized), <b>08:30–12:00, Room 1.61</b>
	<b>TS5.3/EMRP4.3/NH4.9/SM3.3</b> , Active faulting, surface deformation, the earthquake cycle and the implication on seismic hazard assessment (Fault2SHA) (co-organized), <b>08:30–15:00, Room G1</b>
	<b>GI1.1/EMRP4.16/SSS12.25</b> , Applications of Data, Methods and Models in Geosciences (co-organized), <b>08:30–10:00, Room D2</b>
<b>WE2</b> , 10:30–12:00	<b>EMRP1.4/GD7.6/NH3.17/SM6.3</b> , Rock physics and geomechanical characterisation of rocks from micro to macroscale: the role of anisotropy and hydro-mechanical coupling (co-organized), <b>08:30–12:00, Room 0.31</b>
	<b>G4.1/EMRP4.1/GD8.7/NH3.14/TS8.9</b> , Acquisition and processing of gravity and magnetic field data and their integrative interpretation (co-organized), <b>08:30–12:00, Room 1.61</b>
	<b>TS5.3/EMRP4.3/NH4.9/SM3.3</b> , Active faulting, surface deformation, the earthquake cycle and the implication on seismic hazard assessment (Fault2SHA) (co-organized), <b>08:30–15:00, Room G1</b>
	<b>GI3.2/EMRP4.17/ESS11.12/NH6.11</b> , Sensing techniques, geophysical methods, sensor network architectures and data analysis methods for critical and transport infrastructures monitoring and diagnostics (co-organized), <b>10:30–12:00, Room D2</b>
<b>WEL</b> , 12:15–13:15	<b>DM5/EMRP</b> , Division meeting for Earth Magnetism & Rock Physics (EMRP) (co-organized), <b>12:15–13:15, Room K2</b>

<b>WE3</b> , 13:30–15:00	<b>EMRP3.1</b> , Environmental Magnetism: advances and perspectives, <b>13:30–17:00, Room 0.31</b>
	<b>TS5.3/EMRP4.3/NH4.9/SM3.3</b> , Active faulting, surface deformation, the earthquake cycle and the implication on seismic hazard assessment (Fault2SHA) (co-organized), <b>08:30–15:00, Room G1</b>
	<b>GD5.1/EMRP4.7/GMPV2.10</b> , Subduction dynamics from surface to deep mantle (co-organized), <b>13:30–17:00, Room K1</b>
	<b>GI3.3/EMRP4.35/ESSI1.10/NH9.20</b> , From Artefact to Historical Site : Geoscience and Non-Invasive Methods for the Study and Conservation of Cultural Heritage (co-organized), <b>13:30–15:00, Room M2</b>
<b>WE4</b> , 15:30–17:00	<b>EMRP3.1</b> , Environmental Magnetism: advances and perspectives, <b>13:30–17:00, Room 0.31</b>
	<b>GD5.1/EMRP4.7/GMPV2.10</b> , Subduction dynamics from surface to deep mantle (co-organized), <b>13:30–17:00, Room K1</b>
<b>Thursday, 27 April</b>	
<b>TH1</b> , 08:30–10:00	<b>EMRP1.2/GI3.18/SM2.5</b> , Multi-scale measurements of the Earth's properties and imaging techniques: from laboratory to large-scale Earth phenomena (co-organized), <b>08:30–10:00, Room -2.91</b>
	<b>EMRP2.1/ESSI1.15/GI1.12</b> , Unveiling hidden features of the geomagnetic field: measurements, data analysis and modelling (co-organized), <b>08:30–10:00, Room -2.31</b>
	<b>EMRP3.3</b> , Paleomagnetism and magnetic fabric: Recent advances and links to tectonics and deep Earth dynamics, <b>08:30–15:00, Room 0.31</b>
	<b>TS9.3/EMRP4.2</b> , Reconstruction of East Asian Blocks in Pangea (co-sponsored by JpGU) (co-organized), <b>08:30–12:00, Room G1</b>
	<b>GD7.2/EMRP4.9/SM10.2</b> , Anisotropy from crust to core: Observations, models and implications (co-organized), <b>08:30–12:00, Room K1</b>
<b>TH2</b> , 10:30–12:00	<b>EMRP3.3</b> , Paleomagnetism and magnetic fabric: Recent advances and links to tectonics and deep Earth dynamics, <b>08:30–15:00, Room 0.31</b>
	<b>TS9.3/EMRP4.2</b> , Reconstruction of East Asian Blocks in Pangea (co-sponsored by JpGU) (co-organized), <b>08:30–12:00, Room G1</b>
	<b>GD7.2/EMRP4.9/SM10.2</b> , Anisotropy from crust to core: Observations, models and implications (co-organized), <b>08:30–12:00, Room K1</b>
<b>TH3</b> , 13:30–15:00	<b>EMRP3.3</b> , Paleomagnetism and magnetic fabric: Recent advances and links to tectonics and deep Earth dynamics, <b>08:30–15:00, Room 0.31</b>
	<b>SSP1.3/EMRP4.37/GI3.7</b> , Achievements and perspectives in scientific ocean and continental drilling (co-organized), <b>13:30–17:00, Room 1.85</b>
<b>TH4</b> , 15:30–17:00	<b>EMRP1.1/ERE1.10/GI3.15</b> , Evaluation of coupled reservoir processes: laboratory experiments and numerical modelling (co-organized), <b>15:30–17:00, Room 0.31</b>
	<b>SSP1.3/EMRP4.37/GI3.7</b> , Achievements and perspectives in scientific ocean and continental drilling (co-organized), <b>13:30–17:00, Room 1.85</b>
	<b>ERE1.4/EMRP4.40/TS2.6</b> , Fracture, mechanics and flow in tight reservoirs (co-organized), <b>15:30–17:00, Room 0.96</b>
<b>TH6</b> , 19:00–20:00	<b>ML22/EMRP</b> , Petrus Peregrinus Medal Lecture by John Tarduno (co-organized), <b>19:00–20:00, Room D3</b>
<b>Friday, 28 April</b>	
<b>FR1</b> , 08:30–10:00	<b>EMRP3.2/GI1.7</b> , Geomagnetic field variations in ancient times: new paleo/archeomagnetic data and models (co-organized), <b>08:30–10:00, Room 0.31</b>

	<b>GD3.2/EMRP4.24/SM10.1</b> , Understanding Earth's mantle with links to geological cycles (co-organized), <b>08:30–15:30, Room K1</b>
<b>FR2</b> , 10:30–12:00	<b>ERE4.1/EMRP4.15/HS11.6/TS2.5</b> , Mechanics and flows in shale rocks: properties and processes (co-organized), <b>10:30–17:00, Room D2</b>
	<b>GD3.2/EMRP4.24/SM10.1</b> , Understanding Earth's mantle with links to geological cycles (co-organized), <b>08:30–15:30, Room K1</b>
<b>FR3</b> , 13:30–15:00	<b>GI2.6/AS4.48/EMRP4.5/NH8.7</b> , Geoscience applications of environmental radioactivity (co-organized), <b>13:30–15:00, Room L8</b>
	<b>ERE4.1/EMRP4.15/HS11.6/TS2.5</b> , Mechanics and flows in shale rocks: properties and processes (co-organized), <b>10:30–17:00, Room D2</b>
	<b>GD3.2/EMRP4.24/SM10.1</b> , Understanding Earth's mantle with links to geological cycles (co-organized), <b>08:30–15:30, Room K1</b>
<b>FR4</b> , 15:30–17:00	<b>ERE4.1/EMRP4.15/HS11.6/TS2.5</b> , Mechanics and flows in shale rocks: properties and processes (co-organized), <b>10:30–17:00, Room D2</b>

## EMRP – Earth Magnetism & Rock Physics (#EGU17EMRP) – PICOs

Wednesday, 26 April

WE3, 13:30–15:00

TS3.3/EMRP4.23, Microstructure and texture analysis: New methods and interpretations (co-organized), **PICO spot 5b**

## EMRP – Earth Magnetism & Rock Physics (#EGU17EMRP) – Posters

### Monday, 24 April

<b>MO5</b> , 17:30–19:00	<b>GD8.1/EMRP4.11/SM4.10</b> , Linking observations to theoretical predictions in geodynamics (co-organized), <b>Hall X2, X2.346–X2.357</b>
	<b>SM2.2/EMRP4.13/GD5.8/NH4.13/TS5.7</b> , Understanding large subduction earthquakes by integrating geological and geophysical observations, laboratory results, and numerical modeling (co-organized), <b>Hall X3, X3.25–X3.47</b>
	<b>TS2.1/EMRP4.20</b> , Faults: the deformation they cause and their effect on long-term crustal strength (co-organized), <b>Hall X2, X2.166–X2.187</b>
	<b>TS2.3/EMRP4.21/ERE5.7</b> , Structures and patterns in fractured and porous media: witnesses for paleostress and fluid flow (co-organized), <b>Hall X2, X2.188–X2.212</b>
	<b>GD6.3/EMRP4.26/SM6.2</b> , Geodynamics of the Caucasian-Arabian Syntaxis and the East African Rift system (co-organized), <b>Hall X2, X2.330–X2.345</b>
	<b>GD5.2/EMRP4.28/SM6.9</b> , Orogenesis and geodynamics related to the collision of macro- and micro-plates (co-organized), <b>Hall X2, X2.298–X2.313</b>
	<b>GI3.5/EMRP4.36</b> , Innovative instrumentation and data processing methods in near surface geophysics (co-organized), <b>Hall X4, X4.149–X4.165</b>
	<b>GD3.1/EMRP4.41/GMPV6.6/PS9.3/SM10.12</b> , Dynamics of the mantle and core in the Earth and planetary bodies: from magma oceans to the present day (co-organized), <b>Hall X2, X2.277–X2.297</b>

### Tuesday, 25 April

<b>TU5</b> , 17:30–19:00	<b>EMRP1.3/GI3.16/GMPV6.1/SM2.4/TS5.6</b> , Earthquakes: from slow to fast, from the field to the laboratory (incl. Division Outstanding ECS Award Lecture by Marie Violay) (co-organized), <b>Hall X2, X2.90–X2.112</b>
	<b>EMRP2.2/ERE6.6</b> , Advancements in magnetic field studies and natural resources exploration (co-organized), <b>Hall X2, X2.117–X2.129</b>
	<b>EMRP2.3</b> , Electromagnetic geophysics, <b>Hall X2, X2.130–X2.146</b>
	<b>NH4.5/AS4.31/EMRP4.4/SM9.3</b> , Short-term Earthquakes Forecast (StEF) and multi-parametric time-Dependent Assessment of Seismic Hazard (t-DASH) (co-organized), <b>Hall X3, X3.150–X3.170</b>
	<b>SM2.1/EMRP4.12</b> , Earthquake source processes - Imaging methods, numerical modeling and scaling (co-organized), <b>Hall X3, X3.1–X3.37</b>
	<b>GI3.6/EMRP4.18/ERE5.9/SSP1.7/SSS12.27</b> , Geoscientific Underground Labs and Test Sites (co-organized), <b>Hall X4, X4.215–X4.224</b>
	<b>TS3.1/EMRP4.22</b> , Strain localisation and rheology of the lithosphere in nature, experiments and theory. Including the Stephan Mueller Medal lecture by Cees Passchier (co-organized), <b>Hall X2, X2.177–X2.197</b>
	<b>GD6.2/CL1.32/CR5.6/EMRP4.29/SM10.6/TS9.7</b> , Unveiling the structure, evolution and influence of the Antarctic Lithosphere (co-organized), <b>Hall X2, X2.289–X2.305</b>
	<b>GMPV1.3/EMRP4.32/ERE6.5/SSP1.8/TS3.8</b> , Multi-scale analysis of geological materials: Minerals, Fluids, Cracks, Pores & Permeability (Sponsored by AGU-VGP) (co-organized), <b>Hall X2, X2.344–X2.369</b>

## Wednesday, 26 April

<b>WE5, 17:30–19:00</b>	<b>EMRP1.4/GD7.6/NH3.17/SM6.3</b> , Rock physics and geomechanical characterisation of rocks from micro to macroscale: the role of anisotropy and hydro-mechanical coupling (co-organized), <b>Hall X2, X2.183–X2.200</b>
	<b>EMRP3.1</b> , Environmental Magnetism: advances and perspectives, <b>Hall X2, X2.201–X2.221</b>
	<b>G4.1/EMRP4.1/GD8.7/NH3.14/TS8.9</b> , Acquisition and processing of gravity and magnetic field data and their integrative interpretation (co-organized), <b>Hall X3, X3.94–X3.115</b>
	<b>TS5.3/EMRP4.3/NH4.9/SM3.3</b> , Active faulting, surface deformation, the earthquake cycle and the implication on seismic hazard assessment (Fault2SHA) (co-organized), <b>Hall X2, X2.222–X2.257</b>
	<b>GD5.1/EMRP4.7/GMPV2.10</b> , Subduction dynamics from surface to deep mantle (co-organized), <b>Hall X2, X2.362–X2.381</b>
	<b>GD7.1/EMRP4.8/TS8.8</b> , Long-term rheological behavior of the crust and mantle inferred from observations and models at laboratory and geological time and spatial scales (EGU-AOGS session) (co-organized), <b>Hall X2, X2.382–X2.392</b>
	<b>GD8.4/EMRP4.10/TS8.7</b> , Recent advances in Geodynamics: Computational methods and applications (co-organized), <b>Hall X2, X2.393–X2.403</b>
	<b>GI1.1/EMRP4.16/SSS12.25</b> , Applications of Data, Methods and Models in Geosciences (co-organized), <b>Hall X4, X4.258–X4.273</b>
	<b>GI3.2/EMRP4.17/ESSI1.12/NH6.11</b> , Sensing techniques, geophysical methods, sensor network architectures and data analysis methods for critical and transport infrastructures monitoring and diagnostics (co-organized), <b>Hall X4, X4.282–X4.302</b>
	<b>GI3.3/EMRP4.35/ESSI1.10/NH9.20</b> , From Artefact to Historical Site : Geoscience and Non-Invasive Methods for the Study and Conservation of Cultural Heritage (co-organized), <b>Hall X4, X4.303–X4.320</b>
<b>GI1.3/AS4.41/CL5.17/EMRP4.39/HS11.7/NH6.9/SM5.9</b> , Environmental sensor networks (co-organized), <b>Hall X4, X4.274–X4.281</b>	

## Thursday, 27 April

<b>TH5, 17:30–19:00</b>	<b>EMRP1.1/ERE1.10/GI3.15</b> , Evaluation of coupled reservoir processes: laboratory experiments and numerical modelling (co-organized), <b>Hall X2, X2.117–X2.132</b>
	<b>EMRP1.2/GI3.18/SM2.5</b> , Multi-scale measurements of the Earth's properties and imaging techniques: from laboratory to large-scale Earth phenomena (co-organized), <b>Hall X2, X2.133–X2.143</b>
	<b>EMRP2.1/ESSI1.15/GI1.12</b> , Unveiling hidden features of the geomagnetic field: measurements, data analysis and modelling (co-organized), <b>Hall X2, X2.144–X2.154</b>
	<b>EMRP3.2/GI1.7</b> , Geomagnetic field variations in ancient times: new paleo/archeomagnetic data and models (co-organized), <b>Hall X2, X2.155–X2.171</b>
	<b>EMRP3.3</b> , Paleomagnetism and magnetic fabric: Recent advances and links to tectonics and deep Earth dynamics, <b>Hall X2, X2.172–X2.214</b>
	<b>TS9.3/EMRP4.2</b> , Reconstruction of East Asian Blocks in Pangea (co-sponsored by JpGU) (co-organized), <b>Hall X2, X2.331–X2.345</b>
	<b>GI2.6/AS4.48/EMRP4.5/NH8.7</b> , Geoscience applications of environmental radioactivity (co-organized), <b>Hall X4, X4.283–X4.299</b>
	<b>GD7.2/EMRP4.9/SM10.2</b> , Anisotropy from crust to core: Observations, models and implications (co-organized), <b>Hall X2, X2.377–X2.391</b>

	<b>GD3.2/EMRP4.24/SM10.1</b> , Understanding Earth's mantle with links to geological cycles (co-organized), <b>Hall X2, X2.359–X2.376</b>
	<b>SSP1.3/EMRP4.37/GI3.7</b> , Achievements and perspectives in scientific ocean and continental drilling (co-organized), <b>Hall X2, X2.1–X2.29</b>
	<b>ERE1.4/EMRP4.40/TS2.6</b> , Fracture, mechanics and flow in tight reservoirs (co-organized), <b>Hall X1, X1.1–X1.15</b>
<b>Friday, 28 April</b>	
<b>FR5, 17:30–19:00</b>	<b>ERE4.1/EMRP4.15/HS11.6/TS2.5</b> , Mechanics and flows in shale rocks: properties and processes (co-organized), <b>Hall X1, X1.8–X1.43</b>