

#### IV ESA EARSeL CNR School on Forest Fires (ESRIN, 30 Sept - 01 Oct 2019)

<https://cnrfire2019.eu/#training>

Monday 30/09	
08:30 - 09:00	Registration
09:00 - 09:15	<b>Opening ceremony</b> Speaker: ESA (Francesco Sarti)- EARSeL /CNR (Rosa Lasaponara)
09:15 - 10:00	Introduction to ESA EO Programme and to ESA CCI Programme in the context of Fire Speaker: Stephen Plummer (ESA), Francesco Sarti (ESA) ESA EO Data Access and Users Services (non Copernicus) Speaker: Véronique Amans (ESA)
10:00 - 11:00	An Overview of remote sensing for Forest Fires Speakers: Rosa Lasaponara
11:00 - 11:30	Coffee Break
11:30 - 12:00	<b>Theory/Demo:</b> Self Organized Maps (SOM) for Burned Areas and Fire Severity. Fire Emissions: Sentinel- based monitoring Speaker: Rosa Lasaponara / Maria Danese (CNR)
12:00 - 13:00	Lunch Break
13:00 - 14:45	<b>Demo:</b> Machine Learning for Burnt Area Mapping Speaker: Dimitris Stavrakoudis (Aristotle University of Thessaloniki)
14:45 - 15:15	Coffee Break
15:15 - 16:15	<b>Theory:</b> Reminders of SAR basics. Discussion on challenges of S1 for Fire applications Speaker: Antonio Pepe (CNR)
16:15 - 17:15	<b>Exercise:</b> Burned area mapping with S1 (SNAP) Speaker: Amalia Castro (RSAC c/o ESRIN), Antonio Pepe (CNR)
17:15 - 17:30	Open Discussion, Questions and Answers
17:30 - 19:00	Ice breaker

Tuesday 01/10	
09:00 - 10:30	<b>Theory:</b> Satellite Time Series Analysis. Combined InSAR/SAR-Amplitude-based approaches for Change Detection Analyses Speaker: Antonio Pepe
10:30 - 11:00	Coffee Break
11:00 - 12:30	<b>Reminders of Theory and Exercise:</b> Burned area mapping with S2 (SNAP) Speaker: Tereza Smejkalova (Copernicus Research and User Support Service - RUS)
12:30 - 13:30	Lunch Break
13:30 - 14:30	<b>Reminders of Theory and Exercise:</b> Active fire mapping with S3 (SNAP) Speaker: Georgia Karadimou (RUS)
14:30 - 15:30	<b>Reminders of Theory and Exercise:</b> Aerosol monitoring with Sentinel-5P Speaker: Miguel Castro Gómez (RUS)
15:30 - 15:45	Coffee Break & Feedback collection
15:45 - 16:45	<b>Exercise:</b> Soil Moisture for Fire Hazard Estimation (CCI Toolbox, Python) Speaker: Amalia Castro
16:45 - 17:30	<b>Exercise:</b> EO Browser Wildfire case study (S1, S2 and S5-P) Speaker: Amalia Castro
17:30 - 18:00	<b>Open Discussion &amp; Closing Remarks (all speakers)</b>