



LEVERHULME WILDFIRES

Spring Symposium



LEVERHULME
Centre for **Wildfires,**
Environment and Society

14-15th May 2024, King's College London

PROGRAMME

The Leverhulme Wildfires Spring Symposium aims to bring together members of our Centre – our PhD students, our PDRAs and our academics (as well as some affiliates and guests) - to share and discuss the latest of our research. It is a chance to reconnect, meet new people, and discover what others are doing. This helps provide everyone with a broader understanding of wildfires, from different disciplinary perspectives and different geographical regions, and provides a more holistic view of what the Centre is collectively doing. Short presentations by our Early Career Researchers will form the core of the symposium, and we have also scheduled plenty of time for discussions – both on the presentations on other broader topics.

Location: King's College London Great Hall, Strand Campus, WC2R 2LS.

Those external to KCL should report to reception, where they will have a list of attendees – you will then be allowed in. For those unable to join in person, you can join for the presentations and Q&A via MS Teams.

The Leverhulme Wildfires Spring Symposium (formally the 'ECR symposium') will run every two years, on the alternate year to the Leverhulme Wildfires Summer Conference.

DAY 1 - Tuesday 14th May

	<i>Duration (mins)</i>	<i>Start time</i>	<i>End time</i>	<i>Title/Information</i>
Arrive		09:45	10:00	Please arrive ready for a prompt start at 10am
Welcome	10	10:00	10:10	Introduction to the Symposium and Housekeeping (Adriana Ford)

Objective 1: Understanding Fire

What social and environmental factors and feedbacks govern wildfire regimes, including the sources, frequency, intensity, timing, and spatial pattern of fire on the landscape, past and present?

Presentations (Group 1) *Fire – Vegetation Interactions*

Luke Sweeney	5	10:10	10:15	What's driving European palaeofire? Reconstructing tree cover during the Holocene
Yicheng Shen	5	10:15	10:20	Investigating Factors Affecting Photosynthetic Activity Recovery Time
Ramesh Ningthoujam (online)	5	10:20	10:25	Comparison of fire and logged driven vegetation properties of tropics
Daniel Gallagher	5	10:25	10:30	Long-term interactions between vegetation, fire, and human impact in Guyana
Amos Chege Muthiuru	5	10:30	10:35	Wildfire in Protected Areas: Spatial patterns, effects on large mammals' habitats, and human-wildlife interactions in a changing climate
Q&A and Discussion (Group 1)	20	10:35	10:55	

Presentations (Group 2) *Fire in the North and Fire Dynamics*

Eirini Boleti (online)	5	10:55	11:00	Wildfires – effect on CO concentrations
Farrer Owsley-Brown	5	11:00	11:05	Flying over fires
Hafizha Mulyasih	5	11:05	11:10	Smouldering Peat Behaviour in Different Particle Sizes
Imogen Richards	5	11:10	11:15	Sensitivity of wildfire modelling to physical parameters
Q&A and Discussion (Group 2)	15	11:15	11:30	
~~Coffee~~	30	11:30	12:00	
Discussion/ Activity 1	60	12:00	13:00	<i>Thinking about our Research Impact: In a global context, who needs what information (about fire) and how can our research help to provide it? (1)</i>
~~Lunch~~	60	13:00	14:00	

Presentations (Group 3)
Fire in the Tropics - from plantations to savannas

Kapil Yadav	5	14:00	14:05	What happens to fire when plantations start looking like forests?
Rahina Sidiki Alare	5	14:05	14:10	Analysing fire regimes in Ghana's savannahs: the importance of scale and fine scale satellite sensors
Abigail Croker (online)	5	14:10	14:15	Alternative fire management strategies in African savanna-protected areas
Q&A and Discussion (Group 3)	15	14:15	14:30	
Discussion/ Activity 2	60	14:30	15:30	<i>Thinking about our Research Impact: In a global context, who needs what information (about fire) and how can our research help to provide it? (2)</i>
~~Coffee~~	30	15:30	16:00	

Objective 2. Predicting Fire

How can we incorporate new biophysical understanding, social learning and realistic human-environment dynamics so as to model fire regimes and associated patterns of land cover change more accurately, credibly, and accountably?

Presentations (Group 4)
Approaches to predicting fires

Jose Gomez-Dans	5	16:00	16:05	What's the whole story of the satellite fire record?
Dimitra Tarasi	5	16:05	16:10	Northern High-Latitude Peat Fires: From Lab to Modelling
Katie Blackford	5	16:10	16:15	Modelling northern high latitude peat fires under different climate change scenarios using INFERNO-peat
Olivia Haas	5	16:15	16:20	Future global wildfire regimes under high and low climate mitigation efforts
Q&A and Discussion (Group 4)	20	16:20	16:40	

Presentations (Group 5)
Future fire risk – governance, adaptation and evacuation

Ol Perkins	5	16:40	16:45	How far do future fire risk & governance challenges constrain reforestation as a climate change mitigation option?
Michel Valette	5	16:45	16:50	Adaptation to changing wildfires risk: a case study from the Brazilian Amazon
Theodore Keeping	5	16:50	17:00	The Distribution of Wildfire Chance in the USA
Nikolaos Kalogeropoulos	5	17:00	17:05	Analyzing the chances of evacuation in the 2018 Mati Fire
Q&A and Discussion (Group 5)	20	17:05	17:25	
Discussion/ Activity 3	35	17:25	18:00	<i>Strengthening Interdisciplinary Collaboration in the Centre (2)</i>
~~ Buffet Dinner and Networking Event ~~	90	18:00	19:30	<i>A chance to talk and network over a hot buffet (vegan and fish options) and drinks (wine/soft drinks)</i>

DAY 2 - Wednesday 15th May

	<i>Duration (mins)</i>	<i>Start time</i>	<i>End time</i>	<i>Title/Information</i>
Arrive		09:15	09:30	Please arrive ready for a prompt start at 09:30
Welcome	10	09:30	09:40	

Objective 3. Quantifying Impacts

How are people, the places and properties they value, and the resources and ecosystem services they rely on (including biodiversity, air quality, carbon sources/sinks, and climate), affected by wildfire and by changes in the regimes governing it?

Presentations (Group 6) *Fires, Institutions, Forests and Protected Areas*

Giuseppe Brandi	5	09:40	09:45	Wildfire risk and carbon-based asset design
Maximilian Stiefel	5	09:45	09:50	Classifying Wildfire Protection Strategies in Community Wildfire Protection Plans with Natural Language Processing
	5	09:50	09:55	Sovereign Ratings in The Face of Climate and Wildfire Risks
Haleema Misal	5	09:55	10:00	Do wildfires affect Institutional Trust?
Viera Ukropcova	5	10:00	10:05	Corporate agents of deforestation and forest fires: modelling the behaviours of agri-food companies and investors and their environmental outcomes
Q&A (Group 6)	25	10:05	10:30	
~~Coffee~~	25	10:30	11:00	

Presentations (Group 7) *Smoke Emissions and Exposure*

Zitong Li	5	11:00	11:05	Use of AI and Earth Observation in quantifying smoke plumes from Landscape
Toby Wainwright	5	11:05	11:10	Quantifying Air Quality Impacts of the 2024 Burning Season in the Upper ASEAN Region (Thailand, Laos and Vietnam)
Will Maslanka	5	11:10	11:15	Estimating Emissions from High-Latitude Fires: The Adapted FREM Approach
Luke Richardson-Foulger	5	11:15	11:20	Quantifying Trace Gas Emissions from Peat Fires
Mark Grosvenor	5	11:20	11:25	Smoke Exposure of Fire Ranger Crews in a Canadian Wildfire

Hamed Shariatmadar	5	11:25	11:30	Advancing Understanding of GHG and Air Pollutant Emissions through Airborne and Ground Based Systems
Q&A (Group 7)	25	11:30	11:55	
Discussion/ Activity 4	35	11:55	12:30	<i>Strengthening Interdisciplinary Collaboration in the Centre (2)</i>
~~Lunch~~	60	12:30	13:30	

Presentations (Group 8)
Fire Modelling – Climate and Atmosphere

Matt Kasoar	5	13:30	13:35	Every model everywhere all at once
Anastasios Rovithakis	5	13:35	13:40	Effects of climate change on wildfires over a Mediterranean environment
Michaela Flegrova	5	13:40	13:45	Measuring the fire-induced albedo change and associated radiative effect over sub-Saharan Africa
Rafaila - Nikola Mourgela	5	13:45	13:50	The radiative forcing of wildfire emissions from pre-industrial times to present-day
Q&A (Group 8)	20	13:50	14:10	

Objective 4. Living with Fire

What does wildfire mean to different social groups, and what changes in fire regimes and associated landscapes and management practices would be culturally, politically, environmentally, and economically acceptable to whom – and why?

Presentations (Group 9)
Wildfire Risks, Interests and Knowledges

Fanhui Dong	5	14:10	14:15	Sharing partnership with the community for disaster risk reduction of forest fires in high-latitude areas
Erika Piroli	5	14:15	14:20	Understanding the interests behind wildfires using the Q-methodology
Angel Goldsmith	5	14:20	14:25	Managing wildfire risk at the wildland-urban interface in South Africa
Sophie De Pauw	5	14:25	14:30	Beyond Burning: a holistic approach to local fire knowledge
Q&A (Group 9)	20	14:30	14:50	
Closing Remarks (Leadership Team)	10	14:50	15:00	END