

Call for Abstracts

1st International Workshop on Extreme Wildfire Events



Invitation

The **COST Action NERO**—european Network on Extreme fiRe behaviOr (CA22164)—is pleased to invite you to the **1st International Workshop on Extreme Wildfire Events (X-Fire 2025)**, scheduled for **23 – 25 September 2025** in **Nicosia, Cyprus**.

X-Fire aims to establish a dedicated **international forum on extreme wildfire events**. It brings together **scientists, practitioners, and policymakers** to discuss the dynamics, observation, prediction, and management of wildfires that challenge conventional knowledge, management practices, and forecasting tools.

Organizing Committee

Georgios Boustras, Cleo Varianou Mikellidou, Pierantonios Papazoglou, Klelia Vasileiou – *Workshop Host and Local Organizer*

Theodore M. Giannaros, Akli Benali, Nieves Fernandez Anez, Roman Bercak, Georgios Papavasileiou, Giacomo Sbaragli, Fabio Silva, Nuria Prat-Guitart, Ljiljana Seric, Renata Martins Pacheco – *Workshop Organizing Committee*

Venue and Dates



CERIDES – Excellence in Innovation and Technology

European University of Cyprus

1 Diogenous Str, 2404, EUC, Egkomi, Nicosia – Cyprus

<https://cerides.euc.ac.cy/>

 **23 September 2025 08:30 EEST – 25 September 2025 12:30 EEST.**

Registration – Abstract Submission

Participation in X-Fire 2025 is **open to both NERO members and non-members**.

We invite prospective authors to **submit extended abstracts (max. 4 pages**, including references) of their original work. Accepted abstracts will secure a place at the workshop.

There are **no registration fees** for attending and presenting at X-Fire 2025.

 **Submission deadline: ~~Friday 30 May 2025~~ Tuesday 10 June, 23:59 CEST.**

 **Extended abstract template:** <https://bit.ly/3EvSY3d>

 **Submission form:** <https://forms.gle/fkTRFGsEEMmSbsdW9>

Why submit?

Take advantage of this unique opportunity to participate in the inaugural X-Fire Workshop. Share your research, exchange ideas with peers, and gain valuable feedback.

Contributions will be published in an **open-access Book of Abstracts**.

Selected authors will be invited to submit full papers for publication in a **Special Issue** of a **Web of Science-indexed journal** (to be announced).

We welcome **oral** or **poster** contributions related, but not limited, to the following themes:

Workshop Themes

1. Modeling of extreme wildfire events

- a. Wildland fire behavior dynamics:** Research using physics-based, coupled fire-atmosphere, empirical, and statistical models, including ML- and DL-based techniques, to investigate extreme wildland fire behavior. This includes applications to historical case studies, idealized modeling experiments, and data-driven modeling of fire spread and behavior.
- b. Data assimilation:** Techniques for integrating observations into fire spread and behavior models to improve accuracy and predictive capabilities.
- c. Innovations in simulation and visualization techniques:** Advancements in numerical methods, parameterizations, computational efficiency, and visualization techniques, including AI-driven modeling approaches, to enhance real-time simulation and large-scale interpretation of extreme wildfire events.

2. Observing extreme wildfire events

- a. Remote sensing of extreme wildland fire behavior:** Observations of fire-atmosphere interactions, plume dynamics, and fire-induced turbulence using satellite, airborne, UAV/UAS, and ground-based remote sensing techniques.
- b. Field campaigns:** Design and implementation of field campaigns to obtain in situ observations from real-scale extreme wildfire events.
- c. Innovations in sensor technology and data processing:** Advancements in sensor development, automated data retrieval, and processing methods, including AI-enhanced data analytics, to improve the observation and characterization of extreme wildfire events, including multi-sensor fusion and emerging observational technologies.

3. Drivers, trends, and future projections of extreme wildfire events

- a. Environmental drivers and predictive methods:** Research on the drivers of extreme wildland fire behavior, including fuels, weather, and topography, the identification of tipping points, and the development of predictive approaches for extreme wildfire occurrence.
- b. Climatologies and trends:** Analyses of historical trends in extreme wildfire events, linking large-scale climate variability, atmospheric circulation patterns, and fuel changes using observational and modeled datasets.

- c. Future projections:** Assessments of conditions conducive to extreme wildfire events under different climate change scenarios, with a focus on fire-atmosphere interactions.

Financial Support

Participation in X-Fire 2025 is **free of charge**. No registration fees apply. Participants are only responsible for their travel expenses.

The COST Action NERO (CA22164) will cover travel, accommodation, and daily subsistence expenses for eligible participants in X-Fire 2025. Reimbursement is subject to budget availability and will be offered to a **limited number of eligible participants**. The following **baseline limitations** apply:

1. Participants **must be NERO members** (membership verified as of 31 March 2025).
2. **One author per paper** is entitled to reimbursement.
3. Participants **must accept the invitation** sent to them via **e-COST**.
4. Participants **must sign the official attendance list** for each day they are present at the workshop.
5. Participants **must submit their travel reimbursement requests** (TRRs) within 7 days from the day after the end of the workshop (**Friday 3 October 2025, EOB**).
6. Long-distance **travel expenses** will be reimbursed up to a **maximum of EUR 500**, cancellation insurance included, for the roundtrip.
7. Daily allowances (**accommodation and daily subsistence expenses**) will be reimbursed up to a **maximum of EUR 210** from the day preceding the start of the workshop (22 September 2025) and until one day after the end of the workshop (26 September 2025).

Detailed information on the reimbursement modalities are available in the COST Annotated Rules.

Subject to budget availability, **participants eligible for reimbursement will be selected based on the following criteria:**

- Quality of the submitted contribution.
- Gender balance
- Career development
- ITC affiliation
- Geographical distribution