



# European Lighthouse of AI for Sustainability

[www.elias-ai.eu](http://www.elias-ai.eu)



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Funded by  
the European Union

## TDW on Sustainability & AI Agenda



### 09:00 – 09:10 | Welcome & Introductions

- Opening remarks
- Introduction to the workshop's theme: AI and Sustainability
- Overview of the sessions and objectives

Nicu Sebe (UNITN), Filareti Tsalakanidou (CERTH)

### 09:10 – 09:30 | Session 1: Regulatory and Ethical Aspects

Keynote:

- Marko Milosaljevic (University of Ljubljana, Slovenia)

Q&A and Discussion: 5 mins

### 09:30 – 10:10 | Session 2: AI for a Sustainable Planet

Keynotes:

- Saso Dzeroski (Jozef Stefan Institute, Slovenia)
- Marius Leordeanu (National University of Science and Technology POLITEHNICA Bucharest, Romania)

Q&A and Discussion: 10 mins

### 10:10 – 10:50 | Session 3: AI for a Sustainable Society

Keynotes:

- Nicolò Cesa-Bianchi (University of Milan, Italy)
- Ioana Manolescu (INRIA, France)

Q&A and Discussion: 10 mins

### 10:50 – 11:10 | Break

### 11:10 – 11:30 | Session 4: Trustworthy AI for Individuals

Keynotes:

- Lorenzo Baraldi (University of Modena and Reggio Emilia, Italy)
- Nicu Sebe (University of Trento, Italy)

Q&A and Discussion: 10 mins

### 11:30 – 11:50 | Session 5: Fostering the Next Generation of AI Talents

Keynote:

- Charlotte Delage (Institute Polytechnique of Paris, France)

Q&A and Discussion: 5 mins

### 11:50 – 12:30 | Session 6: Entrepreneurship and Tech Transfer

Keynotes:

- Nina Peters (University of Tübingen, Germany)
- Isabelle Siegrist (ETH Zurich, Switzerland)

Q&A and Discussion: 10 mins

### 12:30 – 12:45 | Conclusion & Wrap-up

- Summary of key takeaways
- Final remarks and next steps

Nicu Sebe (UNITN), Filareti Tsalakanidou (CERTH)

# Theme Development Workshop on Sustainability & AI

Theme Development Workshops (TDWs)

7 March, 2025

Bucharest, Romania

## Session 5: Fostering the Next Generation of AI Talents



# Session 5

## Fostering the Next Generation of AI Talents

Presenter: Dr. Charlotte Delage  
(IP Paris)

Email:  
charlotte.delage@telecom-paris.fr

# Fostering Scientific Excellence in Sustainable AI

1. Developing & Equipping a network of promising young researchers with advanced skills to become key actors of Sustainable AI. (*IP Paris*)
2. Expanding the existing world-class European AI community to build the European lighthouse in AI and Sustainability. (*UNIMI & CTU*)

## Goals

# 1. Developing a network of promising young researchers in Sustainable AI

## A PhD & Postdoc Program in Sustainable AI building on the existing network of excellence ELLIS

- Joint supervision in Europe, cross-domain collaboration & mandatory research exchange
- Main point of entry through a yearly competitive call for applications (10% acceptance rate)
- Events organised by the ELLIS and ELIAS networks & mobility support
- Research project linked to Sustainable AI, industry or interdisciplinarity:

🍃 Interpretability & Fairness

🍃 Robust & Trustworthy machine learning

🍃 Earth & Climate Sciences

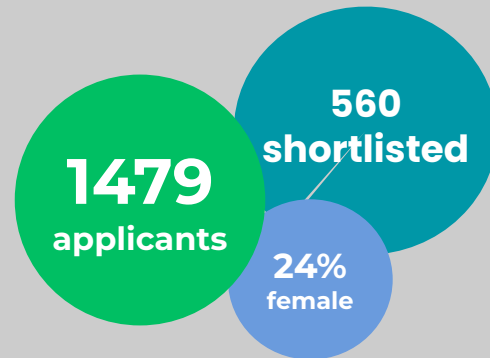
🍃 Law & Ethics

🍃 Machine learning in Chemistry & Material Sciences

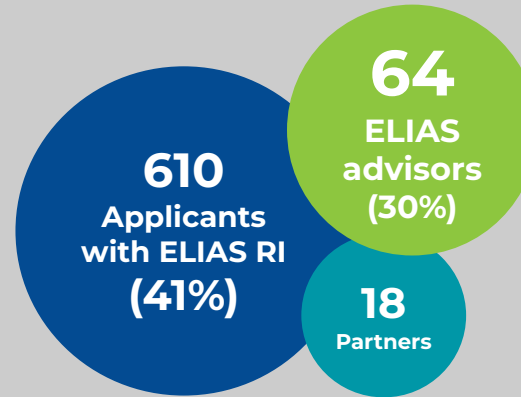
🍃 Tech transfer & Entrepreneurship

# Call for PhD applications (2024-2025)

## Applications



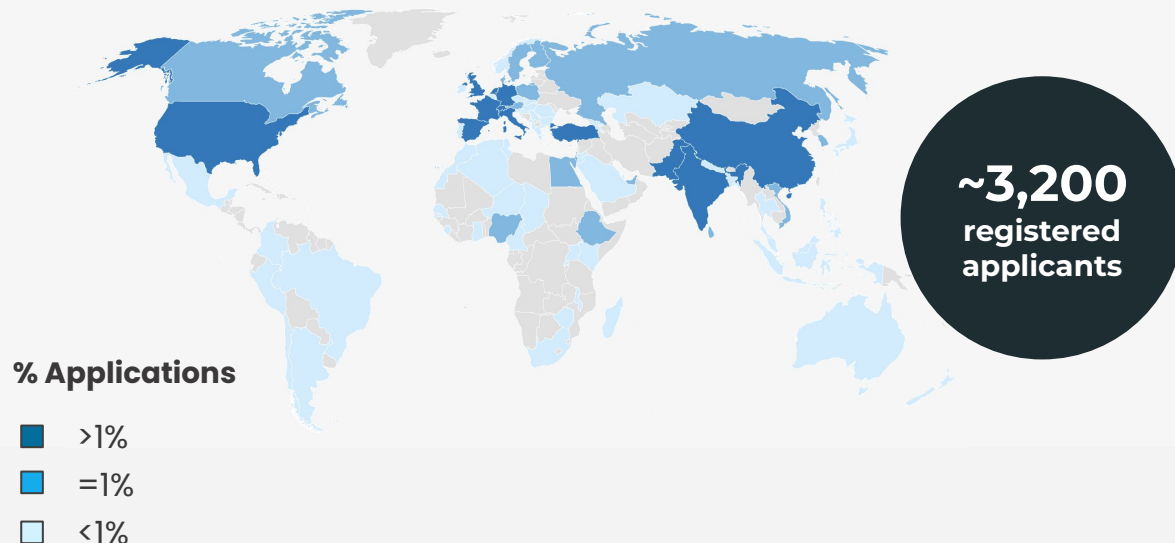
## ELIAS Network



## Outreach



## Country of residence of applicants



## Top 5 nationalities

Indian (17%)
Chinese (15%)
Iranian (9.5%)
German (8%)
Pakistani (5%)



# Events



## Winter/Summer Schools

- Foundation models (**Amsterdam**)
- AI for Earth and Climate Sciences (**Jena**)
- Summer School on Machine Learning for Healthcare and Biology (Manchester)
- Summer School on ML and AI for Health (Lausanne)
- Summer School on Trustworthy AI (Saarbrücken)

## ELLIS Doctoral Symposium

- 2024 (**Paris**): AI & Sustainability
- 2025 (**Poland**): AI & Robustness

## Reading groups

Human-Centric Machine Learning Reading Group annual workshop (**Alicante**)

... And many more!



# The ELIAS Mobility Program

**Who is eligible?** PhD & Postdocs

**Visiting Whom?** Academic or Industry partner in the ELLIS or ELIAS network

**What kind of visit?** Research stays in link with ELIAS

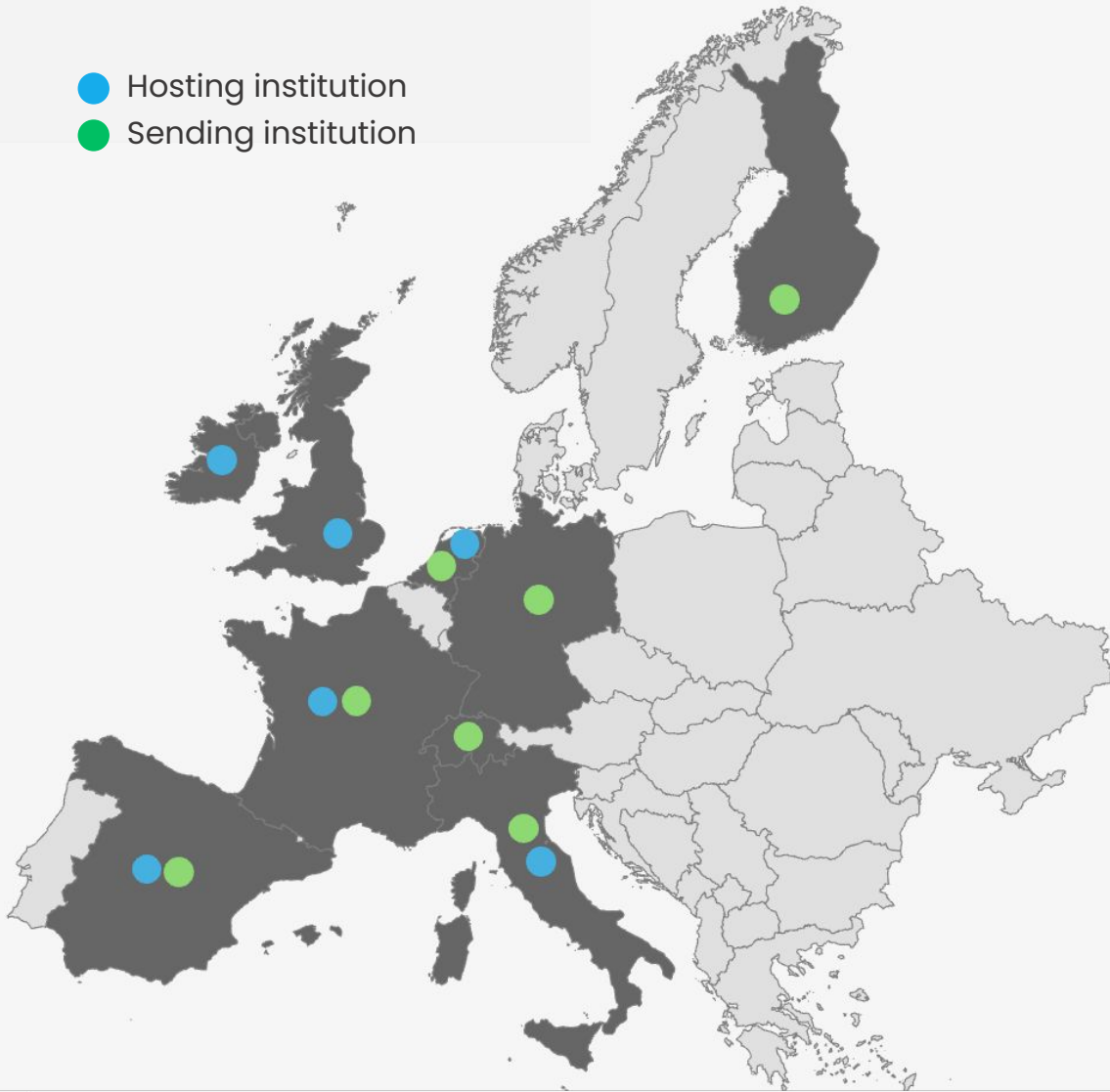
**Where?** Europe

**How long?** Up to 6 months for academic stays, up to 3 months for industry internships

**How much?** Up to 2,400 euros per researcher per year

# ELIAS Mobility Program in 2024

- Hosting institution  
● Sending institution



## Some numbers...

**22** Applications

**9** Countries

**20** PhD students

**2** Postdocs

**27%** Non-ELIAS Applicants

## ... Next Steps?

- Increase geographical coverage
- Encourage cross-domain collaborations
- Promote postdoc applications

## 2.1 Expanding the existing world-class European AI community to build the European lighthouse in AI and Sustainability

### Fellowship program in Sustainable AI building on the existing one in ELLIS

Call for Fellows (senior researchers) & Scholars (junior researchers) to join the ELLIS & ELIAS networks

#### **Goals:**

- Reinforce and expand the ELIAS and ELLIS networks with scientists working in Sustainable AI
- Promote gender balance
- Preserve scientific excellence criteria already present in ELLIS
- Champion representation from underrepresented countries
- Develop a transparent & reliable evaluation process

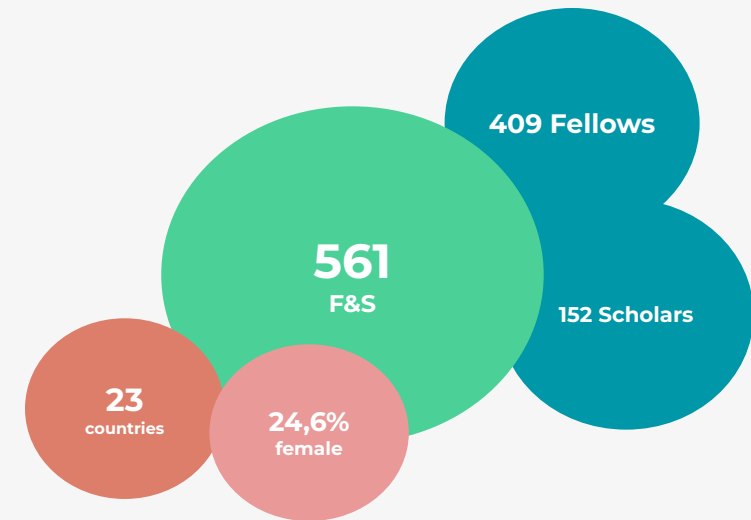
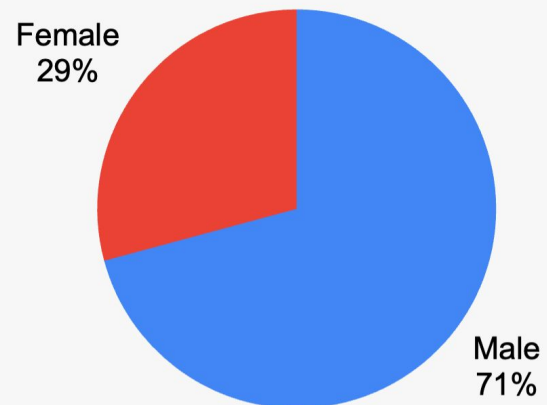


# Call for new Fellows & Scholars (2024)

240 nominations received, acceptance rate of 67%

Profile	Accepted candidates
Fellows	89
Scholars	72

Gender balance for accepted Fellows and Scholars



Current numbers after the call

# New Fellows and Scholars in the ELIAS network

**In total, 34 Fellows/Scholars involved in the ELIAS network after the new call**

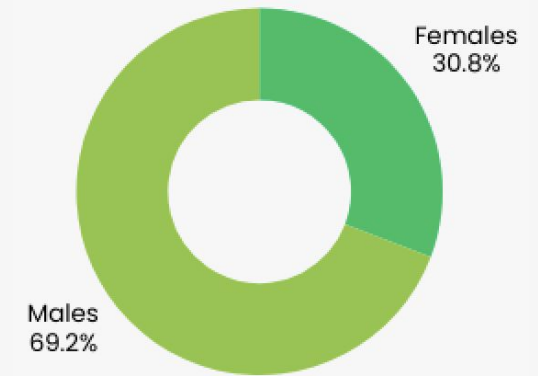
Countries of accepted F/S in ELIAS



Sum of the efforts per WP of these 13 new Fellows and Scholars in ELIAS



Gender balance



With **13 new Fellows/Scholars** from 6 countries, the ELIAS community continues to grow – expanding for the first time in **Poland** and **Greece**! Next call in Spring 2025

## 2.2 Expanding the existing world-class European AI community to build the European lighthouse in AI and Sustainability

### Create a Virtual centre of excellence in Sustainable and Trustworthy AI

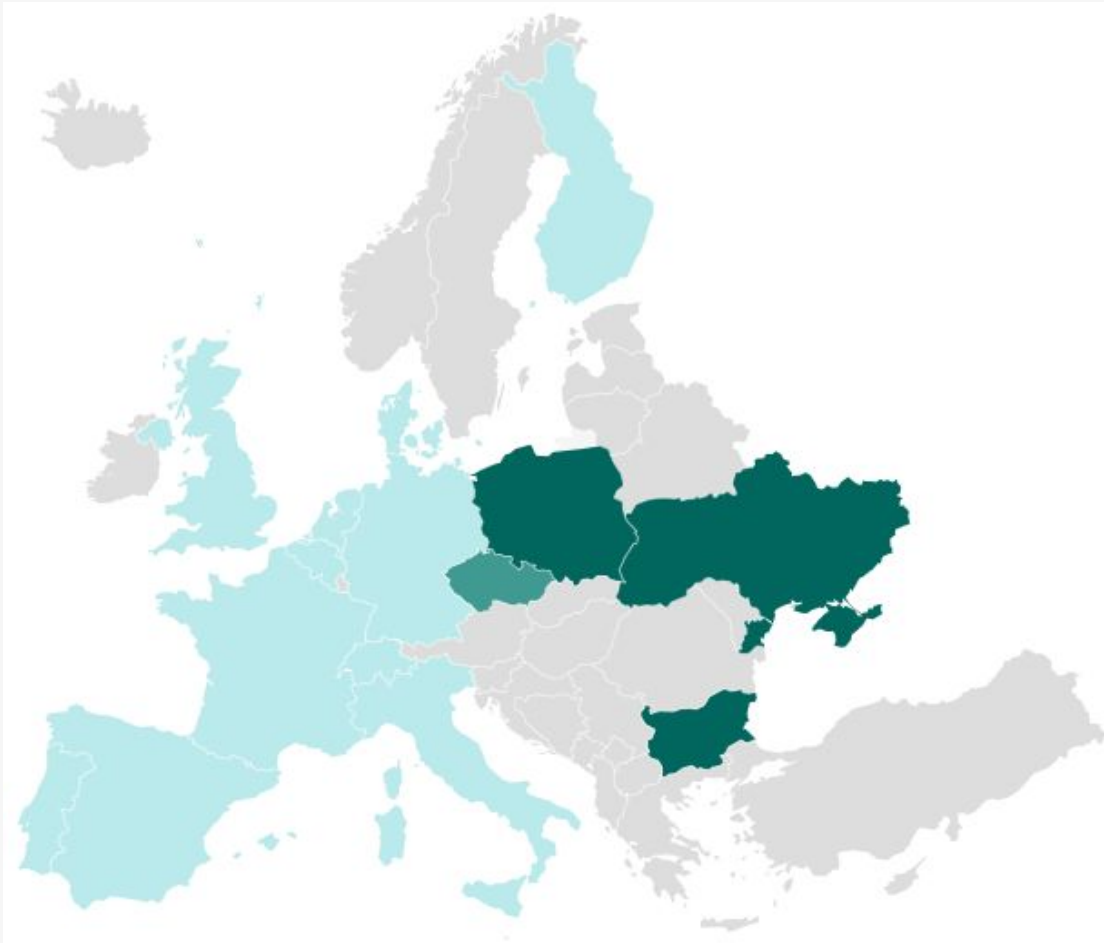
Onboard new institutions focusing on Sustainability to ELLIS and ELIAS and monitor the growth of those networks

#### Goals:

- Grow an inclusive and interdisciplinary research community in synergy with the ELLIS network
- Preserve scientific excellence criteria already present in the ELLIS Units
- Champion representation from underrepresented countries
- Develop a transparent & reliable evaluation & feedback process
- Reinforce the virtual centre of excellence by supporting local workshop & scientific events



# Monitoring of the network




Growth of the ELLIS network over time in underrepresented regions, particularly Eastern Europe:

## Before ELIAS:

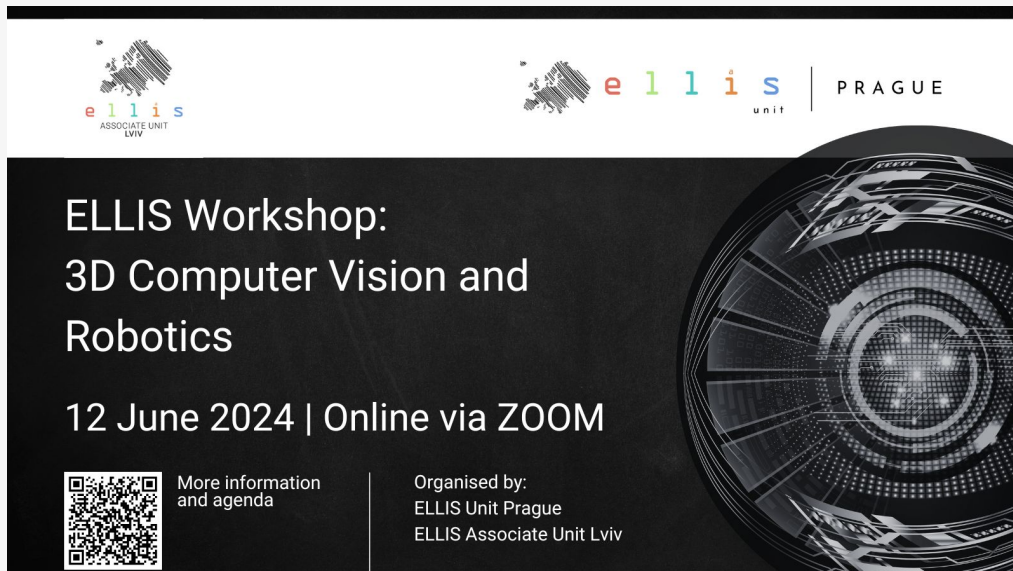
- ELLIS Unit Prague (2019) 

## Since start of ELIAS:

- ELLIS Unit Sofia (2023)
- ELLIS Unit Warsaw (2023) 
- ELLIS Associated Unit Lviv (2023)

A new call for units will be issued in **Spring 2025**

# Support scientific workshops and events

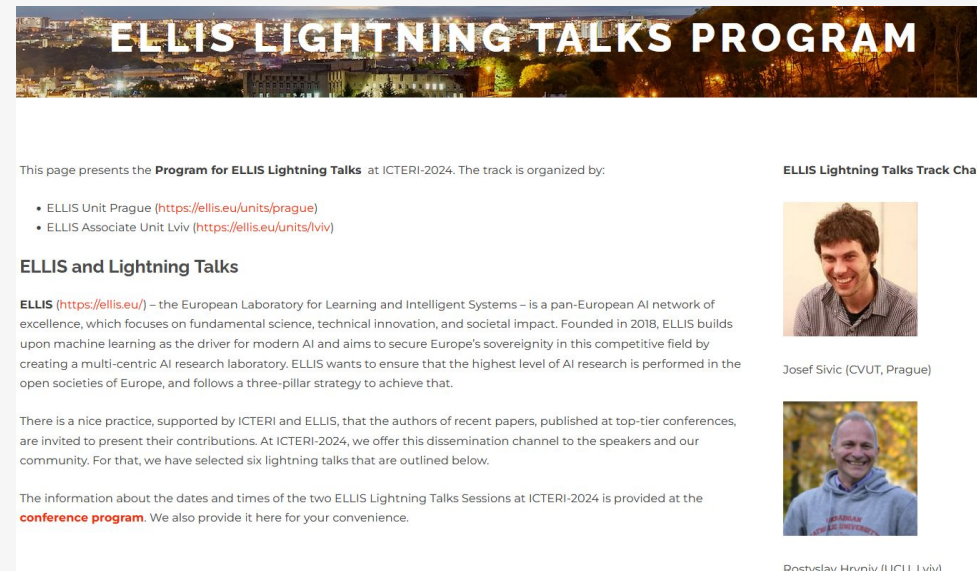


**ELLIS Workshop:**  
**3D Computer Vision and Robotics**

**12 June 2024 | Online via ZOOM**

More information and agenda

Organised by:  
ELLIS Unit Prague  
ELLIS Associate Unit Lviv



## ELLIS LIGHTNING TALKS PROGRAM

This page presents the **Program for ELLIS Lightning Talks** at ICTERI-2024. The track is organized by:

- ELLIS Unit Prague (<https://ellis.eu/units/prague>)
- ELLIS Associate Unit Lviv (<https://ellis.eu/units/lviv>)


### ELLIS and Lightning Talks

**ELLIS** (<https://ellis.eu/>) – the European Laboratory for Learning and Intelligent Systems – is a pan-European AI network of excellence, which focuses on fundamental science, technical innovation, and societal impact. Founded in 2018, ELLIS builds upon machine learning as the driver for modern AI and aims to secure Europe's sovereignty in this competitive field by creating a multi-centric AI research laboratory. ELLIS wants to ensure that the highest level of AI research is performed in the open societies of Europe, and follows a three-pillar strategy to achieve that.


There is a nice practice, supported by ICTERI and ELLIS, that the authors of recent papers, published at top-tier conferences, are invited to present their contributions. At ICTERI-2024, we offer this dissemination channel to the speakers and our community. For that, we have selected six lightning talks that are outlined below.

The information about the dates and times of the two ELLIS Lightning Talks Sessions at ICTERI-2024 is provided at the **conference program**. We also provide it here for your convenience.

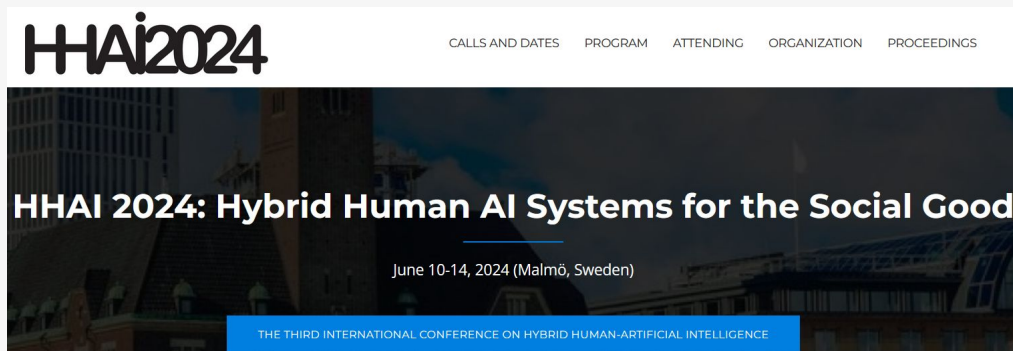
#### ELLIS Lightning Talks Track Chairs



Josef Sivic (CVUT, Prague)



Rostyslav Hryniv (UCU, Lviv)



## HAI2024

CALLS AND DATES PROGRAM ATTENDING ORGANIZATION PROCEEDINGS

### HAI 2024: Hybrid Human AI Systems for the Social Good

June 10-14, 2024 (Malmö, Sweden)

THE THIRD INTERNATIONAL CONFERENCE ON HYBRID HUMAN-ARTIFICIAL INTELLIGENCE



Jožef Stefan  
Institute,  
Ljubljana, Slovenia



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# In Conclusion

## Fostering the next generation of talents in Sustainable AI

- **PhD Program** for young researchers in an active and excellent community
- **Mobility support** in Europe
- **Expansion of the existing community** at the individual & institutional levels
- **Attract & Retain** Talent in Europe

## Future plans

- Focus on **diversity, gender balance, interdisciplinarity & underrepresented regions**
- **Synergy** with ELLIS & other networks of excellence in the future (events, mobility support, etc.)



**Thank you!**  
**Any questions?**




***Pioneering Europe's AI Leadership  
for Sustainable Innovation and  
Economic Growth!***




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 ELIAS - European Lighthouse of AI for Sustainability

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