

SUNDAY 07

19:30 - 21:00

Registration & Welcome reception, Hotel Palacio de Santa Paula

MONDAY 08

8:30-9:00

Registration

9:00-9:30

OPENING

9:30-10:30

Inma Martínez
Towards a assured AI as an economic instrument and a driver of industrial and social progress

10:30-11:00

Coffee Break

11:00-12:00

Augusto Pereira
AI-Driven Transformation of Fusion Engineering

12:00-13:00

Patricia Martín Maderuelo
AI strategy of IFMIF-DONES

13:00-14:00

Lunch

14:00-14:30

Bus to the IFMIF-DONES facilities, Escúzar

14:30-15:30

Philippe Cara
Overview of DONES Programme

15:30-17:00

Round table (chair P. Cara):
"The new fusion landscape: public and private initiatives towards a common goal"

17:00-18:00

Visit to DONES

18:00 - 18:30

Bus back to Granada

Program Xcitech 2026

June 8th - 12th, 2026



Granada (Spain)

All scientific sessions will take place at Quinta Alegre Palace

TUESDAY 09

9:00-10:00

María Ortiz de Zúñiga
Leveraging AI for ITER

10:00-11:00

Mike Churchill
AI for Fusion Device Design, Operation, and Scientific Discovery

11:00-11:30

Coffee Break

11:30-12:30

Agustín Alemán
AI systems for fusion engineering and design: lessons learned from IDOM

12:30-13:30

Christian Schneider
Quantum Computing: Platforms, Prospects and Applications

13:30-14:30

Lunch

14:30-15:30

Ian Gordon
Overview of CATF activities

15:30-16:30

María Vega
Building the path toward fusion: ENSA's industrial experience and technological horizons

16:30-17:00

Coffee Break

17:00-18:00

Carlos Moreno
Tritium Modelling for DONES

18:00-19:00

Jorge Maestre
Liquid Metal Technologies for DONES

WEDNESDAY 10

9:00-10:30

Nawal Prinja
Intelligent Engineering for Extreme Environments: AI's Role in Future Fusion Reactors

10:30-11:00

Franciso Herrera
The Journey of AI: From Predictive to Generative to Agentic Systems

11:00-11:30

Coffee Break

11:30-12:30

Andrea Santamaría
AI for Particle Accelerators: Towards Autonomous Operation

12:30-13:00

Nawal Prinja
Demo - Vibe Coding

13:00-14:00

Lunch / Advisory Committee meeting

14:00-15:30

Maurizio Vretenar
High Intensity Linear Accelerators

15:30-16:30

Enrique García
Overview of the F4E Technology Development Programme

16:30-17:00

Coffee Break

17:00-18:00

Juan Ramón Knaster
IFMIF-DONES accelerator

18:00-19:00

María Luque
Safety approach for DONES

19:00-21:00

Guided Visit through the Albaicín

THURSDAY 11

FRIDAY 12

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| 9:00-10:00 | Francisco Herrera <i>The Journey of AI: From Predictive to Generative to Agentic Systems</i> |
| 10:00-11:00 | Jerzy Stefanowski <i>Explaining Black Box AI Systems with Counterfactuals: Methods and Applications</i> |
| 11:00-11:30 | Coffee Break |
| 11:30-12:30 | Vanessa López <i>AI for Scientific Discovery and Complex Dynamical Systems</i> |
| 12:30-13:30 | Javier Jiménez <i>AI applied to pharmaceutical research</i> |
| 13:30-14:30 | Lunch |
| 14:30-15:30 | Moises Weber <i>R&D Activities at DONES</i> |
| 15:30-16:30 | M.J. Caturla <i>Radiation effects in materials</i> |
| 16:30-17:00 | Coffee Break |
| 17:00-19:00 | European Big Science Masterclass <i>Towards a European Network for Training in Big Science with U. Trieste y U. Genoa · IFMIF-DONES · CTAO · CDTI · CERN · F4E (TBC)</i> |
| 20:45-22:00 | Gala Dinner, Carmen de la Victoria |

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| 9:00-10:00 | Carlos Alejaldre <i>Overview of Fusion in Spain: A Historical Perspective</i> |
| 10:00-11:00 | John Womersley <i>Characteristics and challenges of a Big Science Facility. Learned lessons from the ESS</i> |
| 11:00-11:30 | Coffee Break |
| 11:30-12:30 | Isaac Triguero <i>Towards AI Systems for Scientific Installations: GPAIS, Domain LLMs, and Self-Supervised Monitoring in IFMIF-DONES</i> |
| 12:30-13:30 | Luis Monasterio <i>Experimental Capabilities of IFMIF (DONES)</i> |
| 13:30-14:00 | Closing |

LEGEND

AI for High-Impact Science and Engineering
Directora: María Ortiz de Zúñiga Scientific
**Committee: Inma Martínez, Sehla González
de Vicente, Francisco Herrera**

DONES in depth
Director: Ángel Ibarra



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