ACCADEMIA NAZIONALE DEI LINCEI

LINCEI CONFERENCES ON "THE FUTURE OF HUMANITY"

SCIENTIFIC AND ECONOMIC SCENARIOS FOR NUCLEAR FUSION

3 DECEMBER 2026

Organising committee: Vincenzo AQUILANTI (Linceo, Università di Perugia), Carlo DOGLIONI (Vicepresidente dell'Accademia Nazionale dei Lincei), Massimo INGUSCIO (Linceo, LENS Firenze), Francesco PEGORARO (coordinatore, Linceo, Università di Pisa), Annalisa ROSSELLI (Lincea, Università di Roma Tor Vergata), Marco TAVANI (Linceo, INAF), Roberto ZOBOLI (Linceo, Università Cattolica del Sacro Cuore, Milano).

PROGRAMME

The conference is intrinsically interdisciplinary and has the aim of showing the various angles from which the significant recent developments in fusion can be judged: design of future energy systems, cutting edge applications, industrial consequences and their social impact.

Thursday, 3 December

10.00 Carlo DOGLIONI (Vicepresident of the Accademia Nazionale dei Lincei): *Opening remarks*
Francesco PEGORARO (Linceo, Università di Pisa): *Introduction on the state of fusion research in Italy*
A tribute to Francesco Romanelli's contribution

First session: Fusion in the future of energy

Chair: Francesco PEGORARO

10.20 Roberto BATTISTON (Università di Trento): *Fusion and the timing of the energy transition*

10.50 Carlo Andrea BOLLINO (Università di Perugia): *From scientific breakthrough to economic competitiveness*

11.20 Discussion

11.30 Coffee break

Second session: Socio-economic aspects of fusion

Chair: Annalisa ROSSELLI

11.45 Chiara BUSTREO (CNR Padova): *Key enablers of fusion deployment at scale*

12.05 Francesco GRACCEVA (ENEA Frascati*): The system value of nuclear power in deeply decarbonized electricity systems*

12.25 Samuel WARD (Imperial College, London): *The commercialisation of fusion for the energy market: a review of socio-economic studies*

12.45 Filippo Maria ZERBI (INAF): *Astrophysics and Plasmas: International Projects and Economic Prospects*

13.05 Discussion

13.20 Lunch break

Third session: Cutting edge applications

Chair: Marco TAVANI

14.10 Tommaso ANDREUSSI (Scuola Superiore Sant'Anna, Pisa): *From nuclear fusion to plasma-based space propulsion*

14.30 Claudia RICCARDI (Università di Milano Bicocca): *Non-thermal plasmas for materials and the environment: applications and prospects*

14.50 Enrico ZIO (Politecnico di Milano, Mines Paris, PSL University): *Safety of Fusion*

15.10 Discussion

15.30 Coffee break

Fourth session: Nuclear Fusion between state strategies and private stakeholders

Chair: Massimo INGUSCIO

15.45 Francesca FERRAZZA (ENI): *Eni and its vision for fusion*

16.05 Marco ARESE (member of the Board and of the executive committee of TAE Technologies Inc.): *The greatest challenge: from the science of fusion to industrial fusion*

16.25 Francesco SCIORTINO (CEO of Proxima Fusion): *The industrial platform to launch a new European fusion industry*

16.45 Ambrogio FASOLI (Linceo, EPFL – Swiss Plasma Center): *A European Vision for the Remaining Steps Toward a First-of-a-Kind Fusion Power Plant*

17.05 Final discussion

ROMA - PALAZZO CORSINI - VIA DELLA LUNGARA, 10
Conference Secretariat: convegni@lincei.it – https://www.lincei.it/it

https://www.lincei.it/en/manifestazioni/scientific-and-economic-scenarios-nuclear-fusion

Until 10.00, access is also possible from via Lungotevere della Farnesina, 10
The proceedings may be also followed online at https://www.lincei.it/it/dirette-streaming

A certificate of attendance at the conference will be issued exclusively to those attending in person and must be requested from the staff in the antechamber on the day of the conference