# Inter-American Conference on the Science and Technology of Nuclear Fusion and Its Applications

### Science, Government and Industry

26–27 August 2025 Chilean Nuclear Energy Commission La Reina Nuclear Studies Center

### Agenda

#### Tuesday, 26 August 2025

#### 09:00 - 09:30. Welcome Remarks

- Luis Huerta, Executive Director, Chilean Nuclear Energy Commission (CCHEN)
- Matteo Barbarino, International Atomic Energy Agency (IAEA)
- Ulisses Barres, Director, Latin American Center for Physics (CLAF-UNESCO)

#### 09:30 – 10:45. Session 1. International Overview of Nuclear Fusion

- Steven Cowley, Director, Princeton Plasma Physics Laboratory (PPPL) (25 min)
- Thawatchai Onjun, Director, Thailand Institute of Nuclear Technology (TINT) (25 min)
- Leopoldo Soto, Coordinator, Nuclear Fusion Unit, Latin American Center of Physics (CLAF) and Director, Research Center on the Intersection of for Plasma Physics, Matter & Complexity (P<sup>2</sup>mc–CCHEN) (15 min)

#### 10:45 – 11:00. Coffee Break

#### 11:00 - 12:45. Session 2. Latin America Advances I

- Hugo Ferrari, Argentina (15 min): "Nuclear Fusion Modeling and Computational Capabilities at CNEA and Human Resource Development at the Balseiro Institute"
- Horacio Corti, Argentina (15 min): "Electrochemical Methods of Lithium-6 Enrichment for Tritium Breeder Materials"
- Alejandro Clausse, Argentina (15 min): "Research and Development of Plasma Focus Technology in Argentina"
- Gustavo P. Canal, Brazil (20 min): "Current Status of Nuclear Fusion and Plasma Science Activities in Brazil"

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#### 12:45 - 14:00. Lunch

#### 14:00 – 15:30. Session 3. Latin America Advances II

- Iván Vargas, Costa Rica (20 min): "Status and Perspectives of Nuclear Fusion Research in Costa Rica"
- Julio Herrera, Mexico (20 min): "History and Perspectives of Nuclear Fusion Research in Mexico"
- Felipe Veloso, Chile (15 min): "High Energy Density Physics with Z-Pinch Plasmas: Facilities, Capabilities and Applications to Nuclear Fusion at UC Chile"
- Alejandro Prada, Chile (15 min): "Computational Simulations of Matter at Extreme Conditions"
- Leopoldo Soto, Chile (15 min): "Fusion Research with Miniaturized Plasma Focus Devices at CCHEN: Physics, Matter at Extreme Conditions and Pulsed-Power Technology"

#### 15:30 - 15:45. **Coffee Break**

## 15:45 – 17:15. **Session 4. Roundtable 1. Challenges and Opportunities for Industry: Nuclear Fusion as an Industrial Driver**

**Introduction:** Global outlook on fusion industry , Fusion Industry Association (TBD) (15 min)

- ENEL Group Representative
- Brazilian Manufacturing Industry Representative
- Hernán Cáceres Venegas, Executive Director, Lithium and Salars Institute (to be confirmed)
- CODELCO Representative, National Copper Corporation, Chile
- Moderator: Ulisses Barres, Director Latin American Center for Physics (CLAF)

19:30 - 21:00. **Dinner** 

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### Wednesday, 27 August 2025

# 09:30 – 10:30. Session 5. Roundtable 2. Science in Global South Power Generation: Energy Equity and Energy Justice

- Thawatchai Onjun, Director, Thailand Institute of Nuclear Technology (TINT)
- Ulisses Barres, Director, Latin American Center for Physics (CLAF)
- Luis Huerta, Executive Director, Chilean Nuclear Energy Commission (CCHEN)
- Cristian Cuevas, Undersecretary, Ministry of Science, Technology, Knowledge and Innovation, Chile (to be confirmed)
- Moderator: Matteo Barbarino, International Atomic Energy Agency (IAEA)

10:30 – 10:45. **Coffee Break** 

# 10:45 – 12:15. Session 6. Roundtable 3. Institutional Challenges for Government, Academia and Industry

- Minister of Science, Technology, Knowledge and Innovation, Chile
- Senator, Future Commission on Science, Technology, Knowledge and Innovation,
  Chilean Senate
- Steven Cowley, Director, Princeton Plasma Physics Laboratory, (PPPL), USA
- Máximo Pacheco, Board President, National Copper Corporation (CODELCO), Chile
- One Latin American expert (to be confirmed)
- ENEL Group Representative
- Moderator: Luis Huerta, Executive Director, Chilean Nuclear Energy Commission,
  CCHEN

# 12:15 – 13:00. Lab Visit. Visit to the Research Center for Plasma Physics, Matter and Complexity (P<sup>2</sup>mc) laboratories, CCHEN

13:00 - 14:00. Lunch

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# 14:00 – 15:30. Session 7. Roundtable 4. Nuclear Fusion as a Bridge between Latin America and the World

- Thawatchai Onjun, Director, Thailand Institute of Nuclear Technology (TINT)
- Steven Cowley, Director, Princeton Plasma Physics Laboratory, PPPL
- Ulisses Barres, Director, Latin American Center for Physics (CLAF)
- Expert representatives from Argentina, Brazil, Chile, Costa Rica and Mexico (one per country)
- Moderator: Leopoldo Soto, Coordinator CLAF Nuclear Fusion Unit and Director, P<sup>2</sup>mc–
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### 15:30 – 16:30. Closing Remarks and Final Reflections

- Summary of key conclusions
- Follow-up proposals and regional initiatives

16:30 - 17:00. Coffee

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