

DRAFT: 21 June 2024

INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES, 56th Session
Chairman: A. ZICHICHI; Cochairman: C. GALBIATI
8-14 August 2024

Thursday 8 August 2024

Arrivals

20.00 Conference Dinner

Friday 9 August 2024

9.30 PMP Meetings

20.00 Conference Dinner

Saturday 10 August 2024

9.30 Welcome and Introductory Remarks:

- Fabrizio Zichichi (introducing Antonino Zichichi)
- Antonino Zichichi (via video)
- Government Officials

10.30 Keynote Address: Cristian Galbiati

11.00 Coffee Break

11.30 Session 1: Managing international conflicts and arms control

Session Chairman: William Barletta, *Chairman, Mitigation of Catastrophic Risks PMP*

11.30 Tariq Rauf: *The growing threat of nuclear weapons*

11:45 William Barletta: *New Nuclear Delivery Systems*

12:00 Robert Schock et al: *Risk Assessments and Nuclear Arms Control*

12:15 Karen Hallberg: *Conflict management and the Pugwash process*

12.30 Discussion

13:30 Lunch

15.30 Session 2: Emerging/Re-emerging Infections and Neurological Diseases

Session Chairman: Franco Maria Buonaguro, *Chairman Medicine and Biotechnology PMP*

15.30 Franco M. Buonaguro: *Long COVID Disaster*

15.45 Sofie Nyström: *Connecting the dots between virus amyloids and neurodegenerative diseases*

16:00 Bernardino Ghetti: *Near-atomic structure of brain amyloidoses in human aging and neurodegenerative diseases using cryogenic electron microscopy*

16:15 Emanuele Buratti: *Identifying fluid biomarkers for neurodegenerative diseases*

16:30 Gianluigi Zanusso: *The signs of neurodegeneration in olfactory neuroepithelium*

16.45 Rino Rappuoli: *Emerging and re-emerging pandemics preparedness*

17:00 Discussion

18.00 Adjourn

20.00 Conference Dinner

Sunday 11 August 2024

9.30 Session 3: The power market and the energy transition

Session Chairman: Carmine Difulio, *Chairman, Energy PMP*

9.30 Carmine Difulio: *Introduction, Energy Security and the Power Sector*

9.40 Peter Hartley: *Title TBD*

10.00 Alessandro Clerici: *Title TBD*

10.20 Ashutosh Shastri: *Title TBD*

10.40 Teresa A. Gorman: *Title TBD*

(Presentation titles will be set after a 2 July Zoom call to determine how the several topics can be best distributed among the speakers.)

11:00 Discussion

11.45 Coffee Break

12.15 Session 4: Managing International Conflicts

Session Chairman: William Barletta, *Chairman, Mitigation of Catastrophic Risks PMP*

12:15 Nichole Argo and Lydia Wilson: *Psychological pathways to international conflict*

12:35 Bilal Ayyub: *Modeling Complexity of Conflicts including Economic, Structural and Psychological Perspectives*

12:50 Francesca Giovannini: *Application to NATO, Russia and Ukraine*

13:05 Tariq Rauf: *Rapporteur's Report – Paths Forward in the Conflict in the Middle East*

13:15 Discussion

14.00 Lunch

16.00 Session 5: Perspectives, Risks and Challenges of Cyber Security and AI

Session Chairman: Axel Lehmann. *Chairman, Future of Cyber Security and AI PMP*

16.00 Axel Lehmann: *Introduction*

16:05 Hamadoun Toure: *"Current Status and associated Challenges of AI"*

16.17 Sun Kun Oh: *"Challenges to AI and its Global Position from an Asian Perspective"*

16.29 Arthur Miller: *"The Brave New World of Machines that Make Art, Create Prose and also Think"*

16.41 Pavan Duggal: *"Emerging Legal and Policy Trends impacting AI and Generative AI"*

16.53 Anna Pouliou: *"Immediate Privacy and Cyber Risks from AI and Countering Legislation"*

17.05 Alex Ntoko: *"Advanced Information Management System and Artificial Intelligence"*

17.17 Pier Paolo Menchetti: *"AI in Health"*

17.30 Discussion

18.00 Adjourn

20.00 Conference Dinner

Monday 12 August 2024

9.30 Session 6: Global environmental threats to civil infrastructure

Session Chairman: William Barletta, *Chairman, Mitigation of Catastrophic Risks PMP*

9:30 Jim Lambert & Bilal Ayyub: *Mitigation of Wildfires*

9:55 Robert Rosner: *Solar Geoengineering*

10:15 John Organek: *Solar Storm Disruptions of Power & Communications*

10:30 Anatoly Zaitsev: *Update on defense against cosmic threats*

10:45 Discussion

11.30 Coffee Break

12.00 Session 7: Pollution and Water Crisis

Session Chairman: Lorne Everett, *Chairman, Pollution and Water Crisis PMP*

12.00 Dan Stephens: *Groundwater Contamination: A History of Unintended Consequences*

12.20 Shammy Puri: *Scarcity Plus Global Water Pollution-A Ticking Time Bomb?*

12.40 Vijay Singh: *Water Security in the World's Most Populated Country, India*

13:00 Hugo Loaiciga: *Water and Energy Provision in a Changing World: Prospects for the 21st Century*

13.20 Discussion

14.00 Lunch

16.00 Session 8: Biological and social developmental factors in the epidemic of metabolic and neuro-behavioral diseases

Session Chairmen: Stefano Parmigiani & Fred vom Saal, *Chairmen, Environment and Health PMP*

16.00 Christopher Kassotis: *Environmental contaminants (and mixtures), developmental disruption, and neurometabolic health effects*

16.20 Thomas Zoeller: *Thyroid hormone insufficiency mediates important adverse effects of chemical pollution and nutritional deprivation on brain development.*

16.40 Jose Hernandez: *Prematurity and low birth weight as risk factors for obesity in early childhood and adulthood"*

16.55 Steven Andrew Haas: *The Wounds they Carry: The Long-Term Impacts of Childhood Exposure to War*

17.20 Discussion

18.00 Adjourn

20.00 Conference Dinner

Tuesday 13 August 2024

10.00 Wrap Up Session (press will be present)

10.00 Introduction, Fabrizio Zichichi, Wrap Up Session Moderator

10.10 PMP Chairs' Reports

11.00 Fabrizio Zichichi, *Plenary Discussion of PMP Priorities with PMP Chairs' Panel*

12.00 Cristian Galbiati, *Closing Remarks*

12.30 Fabrizio Zichichi, *Plenary Discussion – Synopsis: 2024 Seminars and Plans for 2025*

13.30 Adjourn Plenary Sessions/Lunch

19.00 Conference Dinner

Wednesday 14 August 2024

Departures