

AI AT SCALE: PERCEPTION, SUSTAINABILITY & GOVERNED AGENCY

A research symposium connecting perceptive AI, SDG observatories, sustainable infrastructure, sovereign capacity and trustworthy agentic systems

Hosted by AI Safety Research Lab, Department of Cyber Security, Amritapuri

 **22-23 JUNE 2026**

Venue: Amriteswari Hall
Format: Hybrid
Host: AI Safety Research Lab,
Dept. of Cyber Security

About the Symposium

This two-day hybrid symposium brings together researchers, faculty members, students and practitioners to examine the next phase of AI: infrastructure-scale intelligence, open knowledge systems for SDGs, sustainable AI/HPC infrastructure, reliable multi-agent systems and zero-trust governance for enterprise agentic AI.

Featured Speakers & Keynote Tags

K1 | Online



Prof. João Pita Costa

IRCAI, Slovenia
Bias-aware SDG
observatory

K2 | Online



Dr. Mérouane Debbah

Khalifa University, UAE
Large Perceptive Models

K3 | Online



Prof. João Paulo Veiga

University of São Paulo,
Brazil
AI/HPC infrastructure for
SDGs

K4 | Online



Prof. Dr. Hoda A. Alkhzaimi

NYU Abu Dhabi
Reliable agentic AI

K5 | In-Presence



Dr. Sivaramakrishnan R. Guruvayur

Aaquarians.ai,
Amrita AI Safety Research
Lab, MBRSG
Zero-trust control plane

K6 | In-Presence



Gilad Gressel

Amrita Center for
Cybersecurity Systems
& Networks
Rules for neural traffic

Programme Schedule

DAY 1	Monday, 22 June 2026	DAY 2	Tuesday, 23 June 2026
Time	Session	Time	Session
13:30	Lighting the Lamp and Welcome Address	10:30 – 11:00	K4: Prof. Dr. Hoda A. Alkhzaimi – Towards Reliable Agentic AI: Reasoning, Verification and Trustworthy Multi-Agent Systems (Online)
14:00 – 15:00	K1: Prof. João Pita Costa – Governing the IRCAI Bias-Aware AI-Enabled SDG Observatory (Online)	11:00 – 12:00	K5: Dr. Sivaramakrishnan R. Guruvayur – AMMA: Agentic Mediation & Monitoring Architecture (In-Presence)
15:00 – 16:00	K2: Dr. Mérouane Debbah – The Next Big Wave in AI: Large Perceptive Models (Online)	12:00 – 13:00	K6: Gilad Gressel – Rules for Neural Traffic: A New Defensive Layer for LLMs (In-Presence)
16:00 – 17:00	K3: Prof. João Paulo Veiga – EU-LAC Collaboration on Infrastructure, Capacity and AI for the SDGs (Online)	13:00 – 13:15	Vote of Thanks
17:00	Tea and Networking		



ABSTRACT & SPEAKER BIO DETAILS



K1 | Online

Prof. João Pita Costa

Governing the IRCAI Bias-Aware AI-Enabled SDG Observatory

Abstract focus:

Positions the IRCAI SDG Observatory as a multilingual, bias-aware knowledge infrastructure integrating news, publications, policies, educational resources, innovation ecosystems and SDG indicators. The talk links open knowledge infrastructure, agentic AI, Green AI orchestration and trusted SDG intelligence.

Bio note:

Senior researcher at IRCAI under UNESCO auspices, with a PhD in Mathematics from the University of Ljubljana. Leads AI-driven SDG Observatory work and has contributed to topological data analysis, public-health big-data policy support and AI education.



K2 | Online

Dr. Mérouane Debbah

The Next Big Wave in AI: Large Perceptive Models

Abstract focus:

Introduces Large Perceptive Models as foundation models that understand complex environments through RF signals, sensors, topology, states and events. The session addresses cross-modal alignment, temporal reasoning, uncertainty, physical grounding and trustworthy perceptive AI for intelligent infrastructure.

Bio note:

Professor at Khalifa University and founding Senior Director of KU Digital Future Institute. His work spans telecommunications, random matrix theory, learning algorithms, 4G/5G/6G technologies, distributed AI systems, semantic communications, NOOR, Falcon LLM and the Falcon Foundation.



K3 | Online

Prof. João Paulo Veiga

EU-LAC Collaboration on Infrastructure, Capacity and AI for the SDGs

Abstract focus:

Explores EU-Latin America and Caribbean cooperation on AI, HPC and data-centre expansion aligned with SDG 9. The talk highlights AI-enabled visualizations, media tracking, governance analysis and risk monitoring across energy, water, supply chains and cybersecurity.

Bio note:

Professor at the University of São Paulo, senior researcher at CAENI-USP and researcher at C4AI. His work spans transnational governance, human rights, multinational companies, social and environmental impact assessment, labour standards and AI ethics/regulation.



K4 | Online

Prof. Dr. Hoda A. Alkhzaimi

Towards Reliable Agentic AI: Reasoning, Verification and Trustworthy Multi-Agent Systems

Abstract focus:

Examines next-generation reliable agentic AI beyond LLM interfaces. Focus areas include autonomous decision-making, planning architectures, verification and validation of outputs, trustworthy multi-agent coordination, safety, robustness, resilience, evaluation frameworks and human-AI oversight.

Bio note:

Associate Vice Provost for Research Translation & Innovation and Assistant Professor of Engineering at NYU Abu Dhabi. Founder/director of emaratsec and contributor to global emerging-technology and cybersecurity advisory ecosystems, including ITU and WEF engagements.



K5 | In-Presence

Dr. Sivaramakrishnan R. Guruvayur

AMMA: Agentic Mediation & Monitoring Architecture

Abstract focus:

Proposes an Agentic Gateway as the zero-trust runtime control plane for enterprise agentic AI. The architecture authorizes, transforms or blocks plans, tool calls, memory operations, external data exchange and agent-to-agent messages while integrating policy-as-code, guardrails, cumulative risk scoring and auditability.

Bio note:

Executive AI consultant, Chief AI Officer, Professor of Practice and Head of AI Safety Research Lab at Amrita. Brings 28+ years of technology leadership and deep specialization in ML, GenAI, LLMs, Agentic AI, AI Safety, Responsible AI and AI governance across BFSI, education and public-sector contexts.



K6 | In-Presence

Gilad Gressel

Rules for Neural Traffic: A New Defensive Layer for LLMs

Abstract focus:

Introduces GAVEL, a rule-based detection framework that monitors model neural activations rather than only surface text. Inspired by Snort and YARA, it expresses precise security logic over interpretable Cognitive Elements to improve auditability, updateability and robustness against obfuscation, jailbreaks and prompt injection.

Bio note:

Research associate and project lead at the Amrita Center for Cybersecurity Systems & Networks. His work focuses on advanced AI system security, including LLM misuse in social engineering and cybercrime, rule-based activation monitoring, PRISM, agent attribution and accountable AI defense.

