Cyber-security, Nuclear Weapon Systems and Strategic Stability

OPEN WEBINAR

THURSDAY MAY 27, 2021 at 5:30 pm (CEST)

Organized by

Gruppo Interdisciplinare su Scienza, Tecnologia e Società *(GI-STS)* dell'Area della Ricerca di Pisa del CNR

In cooperation with

Areaperta – Area della Ricerca CNR di Pisa
Centro Interdisciplinare Scienze per La Pace dell'Università di Pisa
Istituto di Biofisica del CNR
Istituto di Scienza e Tecnologie dell'Informazione ``A. Faedo'' del CNR
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Unione degli Scienziati Per Il Disarmo

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Information technologies play a fundamental role both in civilian and in military systems. Vulnerabilities caused by malfunctions, and errors in the design or implementation of digital systems, are exploited for attacks on them, with consequences that sometimes also result in physical damage. The level of insecurity and uncertainty that this situation entails is particularly dangerous, especially in relation to nuclear weapons, and can have important negative repercussions on crisis management and strategic stability. This webinar will address the issues related to Cyber-security of Critical Infrastructures and the implications of Cyber and Space dependency on Nuclear Assets and Strategic Stability.

Programme

5:30pm *Opening*
    Antonello Provenzale, *President - Area della Ricerca di Pisa del CNR*
    Diego Latella, *CNR-ISTI, GI-STS (IT)*

5:45pm Cyber-security and Critical Infrastructures, a Global Challenge
    Domenico Laforenza, *CNR-IIT (IT)*

6:15pm Strategic Stability and Cyber and Space Dependency in Nuclear Assets
    Beyza Unal, *Chatham House (UK)*

6:45pm *Discussion*

About the Participants

Beyza Unal is the deputy director with the International Security programme at Chatham House. She covers science, technology, security and defence portfolio, specializing in the interaction between emerging technology applications and security. Her research includes nuclear weapons policy, cyber, space, and critical national infra- structure security, quantum technologies, and artificial intelligence applications. Beyza also leads on NATO's security and defence policy at Chatham House. Dr. Unal formerly worked in the Strategic Analysis Branch at NATO Allied Command and Transformation, taught International Relations, transcribed interviews on Turkish political history, and served as an international election observer during the 2010 Iraqi parliamentary elections. She has been given various fellowships for her achievements - most notably she is a William J Fulbright Alumni. She has also received funding from the US Department of Energy to participate workshops in Brookhaven National Laboratory, the James Martin Centre for Nonproliferation Studies, and Sandia National Laboratory. https://www.chathamhouse.org/about-us/our-people/beyza-unal.

Domenico Laforenza is currently an emeritus research associate at the Department of Engineering, ICT and Technologies for Energy and Transportation (DIITET) of the Italian National Research Council (CNR). From the 1st of July 2008 to the 31st of August 2019 he was director of the Institute for Informatics and Telematics (IIT-CNR). In the same period he was also the head of the Registry for domain names for Italy. From the 1st of January 2013 to the 30th June 2019 he was President of the CNR Pisa Research Campus (*Area della Ricerca CNR di Pisa*). From the 1st of January 2014 to 31st of December 2017 Dr. Laforenza was President of ERCIM AISBL (European Research Consortium for Informatics and Mathematics). From April 2015 to October 2017 he is was member of the *Horizon 2020 "Future and Emerging Technologies" Advisory Group.* He was founder and responsible for the High Performance Computing Laboratory at the CNR Institute of Information Science and Technologies (ISTI-CNR) from the 1981 to June 2008. Dr. Laforenza received the doctoral degree in Computer Science from the Department of Computer Science of University of Pisa in 1977. He started work at CNUCE in 1972 where, during his period of employment, he was operator, programmer and performance evaluator until 1981. Since 1981 he has been researcher in Computer Science. His main areas of interest are: high performance computing, parallel and distributed systems programming, Grid and Cloud computing, Internet Governance, and more recently, the impact of IoT and AI on the privacy. From 1996 to 2006 Dr. Laforenza was professor of Parallel and Distributed Applications at the Computer Science Department of the University of Pisa. Dr. Laforenza is author of numerous publications and organiser of National and international ICT events.

Diego Latella is a computer scientist. He is senior researcher of the National Research Concil of Italy, at *Istituto di Scienza e Tecnologie dell'Informazione ``A. Faedo''* (Institute of Information Science and Technology); his main field of research is that of formal/mathematical methods for the design and analysis of systems involving digital technology. He has been member of Computer Professionals for Social Responsibility. He is member of the Scientific Council of *Unione degli Scienziati Per Il Disarmo* (USPID) which he has been the National Secretary of, from 2010 to 2019. He is a member of the Board of Directors of International School On Disarmament and Research on Conflicts (ISODARCO), founded in 1966 by Edoardo Amaldi and Carlo Schaerf, of the Management Committee of the *Laboratorio di Informatica e Società* of the *Consorzio Interuniversitario Nazionale di Informatica* and of the Management Committee of the *Gruppo Interdisciplinare su Scienza, Tecnologia e Società (GI-STS)* of *Area della Ricerca di Pisa del CNR*.

How to attend the webinar
The meeting will be held in Zoom. Please follow the link below to attend the meeting

https://us02web.zoom.us/j/85979020637?pwd=ZmNMbWxoVllXUmxBVUw4TllXZFBVdz09

You shouldn't need to install Zoom on your computer and should be able to access the meeting by only using your browser. In case a meeting ID/Passcode should be asked, here they are:

Meeting ID: 859 7902 0637
Passcode: 334074