

Call for Contributions

Submission:

1. Inform the Chair: with the Title of your Contribution

2. Submission URL:

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=CENICS+2017+Special>

Please select Track Preference as **CYPHYS**

Special track

CYPHYS: Cyber-Physical Security

Chair and Coordinator

Dr. Alie El-Din Mady, Senior Research Scientist, United Technologies Research Center (UTRC) – Cork,
Ireland

MadyAA@utrc.utc.com

along with

CENICS 2017, September 10 - 14, 2017 - Rome, Italy

The Tenth International Conference on Advances in Circuits, Electronics and Micro-electronics

<https://www.iaria.org/conferences2017/CENICS17.html>

Cyber-Physical System (CPS) tightly integrates physical environment with hardware and software elements and as a result identifying whether behavioral attributes are consequence of computations, physical laws, or both working together is challenging. CPS has been at the core of critical infrastructures and industrial systems, such as power and water, transportation systems, medical devices, security systems, building automation and emergency management.

There have been many confirmed cases of cyber-attacks within CPS. These systems are becoming more vulnerable to cyber-attacks due to the wide attack vector resulted from the integration complexity increase. Cybersecurity threats exploit the increased complexity and connectivity of critical CPS based on Internet of Things (IoT), such as, placing the Nation's security, economy, public safety, and health at risk. Typically, the interfaces between hardware components, between hardware and software components, and between software components, as well as between a system and its operators and maintainers, have been sources of vulnerability. When a CPS is attacked, the operation of the corresponding system can lead to physical safety, trigger loss of life, cause enormous economic impact, and thwart the vital missions of businesses, cities, states and the nation.

The goal of this special track is to foster novel, transformative and multidisciplinary approaches that ensure the security of current and emerging cyber-physical systems, called Cyber-Physical Security, by taking into consideration the unique challenges present in this environment. This special track also aims to foster a research community committed to advancing research and education at the confluence of cybersecurity, internet of things, and cyber-physical systems, and to transitioning its findings into engineering practice.

Topics include, but not limited to:

- Embedded systems security
- PUFs/Watermarking
- Trustworthy devices and CPS
- Hardware-based intrusion detection
- Intrusion detection for CPS

- Resiliency and adaptive attack mitigation for CPS
- Security policies and dynamic enforcement for CPS/IoT
- CPS vulnerability analysis
- Device and CPS hardening
- Threat modelling for CPS

Important Datelines:

- Submission: August 2
- Notification: August 9
- Registration: August 16
- Camera ready: August 16

Contribution Types:

- Regular papers [*in the proceedings, digital library*]
- Short papers (work in progress) [*in the proceedings, digital library*]
- Ideas: two pages [*in the proceedings, digital library*]
- Extended abstracts: two pages [*in the proceedings, digital library*]
- Posters: two pages [*in the proceedings, digital library*]
- Posters: slide only [*slide-deck posted on www.iaria.org*]
- Presentations: slide only [*slide-deck posted on www.iaria.org*]
- Demos: two pages [*posted on www.iaria.org*]

Paper Format

- See: <http://www.iaria.org/format.html>
- Before submission, please check and comply with the editorial rules: <http://www.iaria.org/editorialrules.html>

Publications

- Extended versions of selected papers will be published in IARIA Journals: <http://www.iariajournals.org>
- Print proceedings will be available via Curran Associates, Inc.: <http://www.proceedings.com/9769.html>
- Articles will be archived in the free access ThinkMind Digital Library: <http://www.thinkmind.org>

Paper Submission

<https://www.iariasubmit.org/conferences/submit/newcontribution.php?event=CENICS+2017+Special>

Please select Track Preference as **CYPHYS**

Registration

- Each accepted paper needs at least one full registration, before the camera-ready manuscript can be included in the proceedings.
- Registration fees are available at <http://www.iaria.org/registration.html>

Contact

Alie El-Din Mady, United Technologies Research Center (UTRC) – Cork, Ireland

Email: MadyAA@utrc.utc.com, Phone: (+353) (0)21 4551218, e-Fax: (+1) 860-660-8643

CENICS Logistics: steve@iaria.org