



3rd International Conference on Cryptography, Cyber-Security and Information Warfare (3rd CryCybIW)

Hellenic Military Academy

26th - 27th May 2016

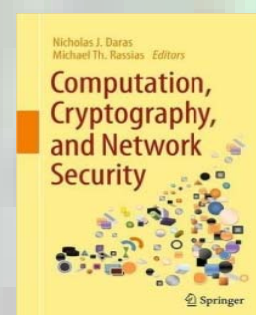
Introduction

A broad spectrum of modern scientific research in areas of interest of Military Science is based on the application of cryptographic methods and information security. Particularly, a pure mathematical thinking is widely applied for constructing suitable models and constitutes the core of several investigations. Already, within the framework of continuous activity for the development of initiatives towards relevant mathematical research, the Hellenic Military Academy, the Department of Mathematics of the National and Kapodistrian University of Athens and the Hellenic Mathematical Society jointly organized successfully the 1st International Conference, April 6, 2012, on the subject of **Cryptography and their Applications in the Armed Forces**.

Selected papers presented at that Conference were published in 2 (two) special issues of the Journal of Applied Mathematics and Bioinformatics (JAMB) (www.scienpress.com/journal_focus.asp?main_id=57&Sub_id=id=IV&volid=84 and also www.scienpress.com/journal_focus.asp?main_id=57&Sub_id=id=IV&volid=122).



After that, the Hellenic Military Academy organized the 2nd International Conference on **Cryptography, Network Security and Applications in the Armed Forces**, Wednesday, April 2, 2014. Selected papers presented at that Conference were published in a special volume by Springer (<http://www.springer.com/us/book/9783319182742>).



In this direction, the Faculty of Mathematics and Engineering Sciences of the Hellenic Military Academy organises the 3rd International Conference on **Cryptography, Cyber-Security & Information Warfare (3rd CryCybIW)**.



Aims

- 1) To give the opportunity to young and established scientists working in the above items to present their research results and exchange views within the framework of a constructive practice.
- 2) To support and promote synergy between scientists engaged in cryptographic issues, cyber-security and information warfare and communications systems.
- 3) To support and further promote research and dissemination of knowledge in the Conference objects.

Representative topics

- Cryptosystems
- Cryptanalysis
- Quantum Cryptography
- Topological Quantum Computations
- Hash Functions
- Codes / Code Systems
- Cryptology and Computational Number Theory
- Algorithmic Number Theory & Cryptography
- The RSA Cryptosystem and Factorization of Integers
- Public-Key Cryptosystems
- Cryptosystems and Chaos Theory
- Automated Tools and Formal Methods
- Transposition Systems
- Cryptographs and Cipher Machines
- Cyber Warfare
- Computer Security
- Network Security
- Information Security
- Biometrics and Cryptography
- Electronic Crime and Ethics in Cyberspace
- Cyber-War and Network Centric Operations in the International Contemporary Geostrategic Environment
- Command and Control Warfare (C2W)
- Information Based Warfare (IBW)
- Psychological Operations (PSYOPS)
- Military Information Support Operations (MISO)



- Economic Informative War
- Information Terrorism
- Semantic Attacks
- Simulation Warfare
- Advanced Communication Networks
- Digital Signal Processing for Telecommunications
- Telecommunications Electronics
- Communications Security
- Wireless Connections / Wearable Technologies
- Techniques of Electronic Warfare
- Digital Systems Design for Military / Space Applications
- Management of Telecommunication Resources
- Advanced Wired Communications
- Optical Communication Systems and Networks
- Satellite Communications
- Military Imaging Systems
- Electro Mechanical Systems and Infrared Systems
- Radar and Sonar Systems
- Military Sensor Systems / CBRN Sensors
- Data Fusion
- Cognitive Communications and Software Defined Radio
- Sensor Networks and Self-Organizing Communication Networks
- Implementation of Transceiver Subsystems with FPGA
- Directional Energy Weapons.

Conference Committees

President of the Conference

Nicholas J. Daras, Hellenic Military Academy, Athens, Greece

Scientific Committee

1. Nikolaos G. Bardis, Hellenic Military Academy, Athens, Greece
2. Dimitrios Choupis, Hellenic Army General Staff
3. Christos Christopoulos, University of Nottingham, U.K.
4. CTJ Dompson, University of Manchester, U.K.
5. Nikolaos Doukas, Hellenic Military Academy, Athens, Greece
6. Sever Dragomir, Victoria University, Australia
7. Demetrius Iracleous, Hellenic Military Academy, Athens, Greece
8. Michael Gargalakos, Hellenic Military Academy, Athens, Greece



9. George Kaimakamis, Hellenic Military Academy, Athens, Greece
10. Nicholas V. Karadimas, Hellenic Military Academy, Athens, Greece
11. Vasia Karamanoli, Hellenic Military Academy, Athens, Greece
12. Irini Karanasiou, Hellenic Military Academy, Athens, Greece
13. Theodore Kostis, Hellenic Military Academy, Athens, Greece
14. Panagiotis Kottis, Hellenic Military Academy, Athens, Greece
15. Nicholas Leonis, Hellenic Military Academy, Athens, Greece
16. Konstantinos Lousios, Hellenic Army General Staff
17. Oleksandr Markovskiy P., National Technical University of Ukraine, Kiev, Ukraine
18. Gerasimos Meletiou, T.E.I. of Epirus, Greece
19. Preda Mihăilescu, University of Göttingen, Germany
20. Traian Muntean, Aix-Marseille University, France
21. Anna Nagurne, University of Massachusetts, U.S.A.
22. Nikolaos Ouzounoglou, National Technical University of Athens, Greece
23. Nicholas Papadakis, Hellenic Military Academy, Athens, Greece
24. Panos Pardalos, University of Florida, U.S.A.
25. Antonius Paschalis, National and Kapodistrian University of Athens
26. Nicholas Petrakos, Hellenic Navy General Staff
27. Dimitrios Poulakis, University of Thessaloniki
28. Themistocles Rassias, National Technical University of Athens, Greece
29. Rassias Michael Th., University of Zürich, Switzerland /Princeton University, U.S.A.
30. Robert Rolland, Institut de Mathématiques de Luminy, France
31. Demetrius Sivridis, National and Kapodistrian University of Athens
32. Benjamin Tams, University of Göttingen, Germany
33. Demetrius Triantafyllou, Hellenic Military Academy, Athens, Greece
34. Michael Vrahatis, University of Patras, Greece.
35. Veron Pascal, University of South Toulon-Var, IMATH, France
36. Nikolaos Zographopoulos, Hellenic Military Academy, Athens, Greece

Organizing Committee (Hellenic Military Academy)

1. Konstantinos Havenetidis
2. Konstantinos Karamatsoukis
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4. Rodoula Makri
5. Konstantina Panagiotidou
6. Maria Poulou
7. Stamatia Sofiou



8. George Toursounoglou

9. Konstantinos Tsimaras

Submission of paper abstracts and papers

Procedure for submitting paper abstracts

Those interested in participating as speakers at the Conference are required to submit an abstract for their papers by **Sunday, April 17, 2016**.

The abstract must contain the following information (in English):

1. Paper title
2. Author name(s), postal and electronic address (es)
3. Aims, methodology, applications and main results of the paper.

Abstracts should be submitted via e-mail to the electronic address njdaras@ilabsse.gr

Subject heading: "**3rd CryCybiW /abstract**".

The abstracts of the papers will be included in the Conference website by **Sunday, May 8, 2016**.

Preparation of the Conference presentations

After accepting the abstracts in the Conference, the participant speakers should submit the slides of their presentations by **Sunday, May 15, 2016**.

Slides should be written in English and submitted in PDF or PPT via e-mail to the electronic address njdaras@ilabsse.gr

Subject heading: "**3rd CryCybiW / preparation**".

Each lecture should last **twenty (20) minutes**.

Paper selection and review for publication

Selected abstracts of papers accepted for presentation in the Conference will be published in a special volume/ journal issue.

Authors are invited to submit electronically the full version of their papers in English at the latest by **Sunday, April 2, 2017** to the electronic address njdaras@ilabsse.gr

Subject heading: "**3rd CryCybiW /paper**".

Each paper submitted for publication will be sent to two independent referees.

Important dates

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|---|----------------|
| ❖ Abstract submission deadline | April 17, 2016 |
| ❖ Presentation acceptance notification | April 24, 2016 |
| ❖ Abstracts' post to website of the Hellenic Military Academy | May 08, 2016 |
| ❖ Submission of presentation slides | May 15, 2016 |
| ❖ Full paper submission deadline | April 02, 2017 |
| ❖ Paper acceptance notification | June 25, 2017 |
| ❖ Publication of Selected Conference Papers | October, 2017 |



Venue

The Conference will be held in the Vari Campus of the Hellenic Military Academy, Athens, Greece.

Registration & Transportation

There is no participation fee in the Conference.

A transportation mean will be available for those attendees who will need it.

For more info at <http://www.sse.gr/>
